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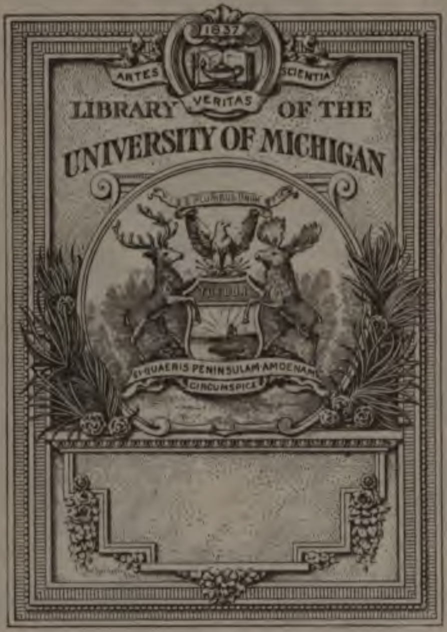

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THE

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EDITED BY

LEARTUS CONNOR, A. M., M. D.,

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THE DETROIT LANCET.

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Original Communications.

Medicine as an Art and as a Science—Its Present Condition and Future Prospects.

BY DR. J. S. CAULKINS, THORNVILLE, MICH.

The medical profession, as practiced in America, is triple. Its separate thirds, surgery, obstetrics, and medicine proper, or the curing of diseases by the administering of drugs internally, are in very unequal states of development, the degree of which is in the order of their naming.

Surgery is not only an art, but an advanced and improving science; obstetrics is an art, but a much less developed science; it remains to be seen that medicine proper is not an art, and is merely an embryonic science. In its widest sense, science is *scientia*—everything that is known; in its more limited or technical sense, a science is a series of inductions made from a large number of carefully observed natural phenomena, together with accurate descriptions of the natural forms associated with the phenomena. These two elements make up every science, induction predominating in some, and description in others; anatomy, for instance, being almost wholly descriptive, and physiology almost wholly inductive. When the practice of medicine becomes a perfected science, it will be thoroughly inductive, and in two directions—in the direction of diagnosis, and in the direction of therapeutics.

Every art must have its science. An art may be defined to be the principles of a science utilized or practically applied, but the definition is, in effect, faulty, since some arts are empirical, and the practice of them may precede the discovery of their

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respective sciences. As far as the practice of medicine can be called an art, it has this character of an empirical art—one that springs into existence before its science. That the art is imperfect, and the science inchoate and embryonic, will be shown, and the reason why.

The attempt will hardly be made to confute the statement that the art or practice of medicine is in a crude and imperfect condition, but let whoever makes assertions prove them, and the proof in this case is that there is no accordance in the methods of the professors of the art. In all other professions there are rules that govern the procedure; here, there are none. What shall we say of a profession where the methods of procedure so constantly vary, and the decisions of its practitioners are so widely apart as are those of the medical profession? What, unless we say the same that we would of a number of lawyers that decided the same case differently, or of several surveyors who returned a different content for the same plat of ground? We must say that all but one of the lawyers take a wrong view of the case, and that all but one of the surveyors have made a mistake. It is no fair illustration of the want of unanimity in the decisions of doctors to compare their differences of opinion with the mistakes of the lawyers or surveyors. These can be decided by an appeal to higher authority; but "who shall decide when doctors disagree?" Where is the standard, the figures that will not lie, to which to appeal? We are compelled to admit that it is a principle of universal application that the degree of unanimity in the decisions of its professors is the test of the perfection to which an art has attained. If perfection and a standard of the truth have been reached, disputes are easily arranged by a reference to that standard; but where it is wanting, disputes and bitter quarrels for opinion's sake are rife. Men never quarrel about that which they know. There is not the least chance for an argument as to whether the three angles of a plane triangle are equal to two right angles; or as to whether a circumference is not, at every point, equally distant from its centre; but where ignorance is mutual, or the matter is only partially understood, each disputant seeing a part of the truth, the reverse is the case, and the chance for quarreling is good. Then men belabor each other vigorously for opinion's sake, like the two knights that fought about the color of the shield. After they had given each other the lie, and broken one another's heads, they discovered that the two sides of the shield were of different colors, and that each had correctly described the color of the side at which he had looked.

To show that the above strictures do not misrepresent the present state of development of the art of medicine, let us briefly consider the following topics:

(a) The changes in medical practice.

(b) The existing difference of opinion concerning the virtues of certain prominent articles of the materia medica.

(c) The present wide difference of opinion concerning the best treatment for several formidable diseases.

(d) The small number of maladies for which we have sure methods of treatment, compared with those that we do not know how to treat.

Under the above headings, the lack of development in the *science*, as well as in the art, of medicine, will be considered to be conjointly discussed, since the two subjects are so intimately connected that what is applicable to the one is very nearly so to the other—quite near enough to save the space needed to review each point separately.

(a) *Concerning the Changes in Medical Practice.*—In this fraction of a magazine article no justice can be done to this extensive topic, a thick volume being needed for that purpose.

It is useless to deny that, as in all sublunary things, there are fashions in medicine, and the fact constitutes the strongest argument in support of the assertion that the art and practice of medicine are in an undeveloped state. Perhaps there may be, to a certain extent, fashions in art, but *science* is immutable, and that which is true to-day was true yesterday, and will be true to-morrow. A few of the most important fashions that have prevailed in medicine will be passed in review.

There are some of the older members of the profession that remember the time when blood-letting was the remedy for all diseases. No matter what the condition of the patient might be, old or young, strong or debilitated, plethoric or anæmic, or what the character of the disease—febrile, inflammatory, or neuralgic—the result of organic lesion or of functional disturbance—the inevitable lancet was the first, and often the daily repeated, resort. Strange as it may sound to the medical student of to-day, it is susceptible of proof that even consumptives were bled—not only to cure the disease in its incipient stages, but well on towards its fatal termination in case of pulmonary hemorrhage. Pregnant women were nearly always bled, and it was a common practice, for men that ailed nothing, to be bled in the spring of the year as a prophylactic. The student of to-day has, and can have, no idea of the firm hold that this custom had during its long reign· We have, at present, no one thing, or half-dozen things, that fill the large space that it occupied in medical practice. It maintained its ground in spite of the ridicule of satirists,* and the advice of some that were "wiser than their time," and as late as the end of the first quarter of this century, there seemed to be no indication that the venerable custom would soon be abandoned; on the contrary, it seemed that it would be the fate of the race of mankind to be bled for the cure of its diseases till the "crack of doom;" but, nevertheless, before the expiration of another quarter of the century, the practice had gone out like a candle that had burned to its socket.

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*LESAGE—ADVENTURES OF GIL BLAS, WRITTEN ABOUT 1620.—I served the licentiate, Sedillo, three months, at the end of which time he fell sick of a fever, and felt his gout increased by the pain which it occasioned; so that, for the first time in his life, which had been long, he had recourse to physicians, and sent for Dr. Sangrado, whom all Vallådolid looked upon as another Hippocrates. I, therefore, went in search of Dr. Sangrado, and brought him to the house. He was a tall, meagre, pale man, who had kept the shears of Clotho (in the Greek mythology, the destiny that cuts the thread of human life) employed during forty years, at least. This learned physician had a very solemn appearance, weighed his discourse, and gave emphasis to his expressions: his reasoning was geometrical, his opinions extremely singular. * * * After having examined the symptoms of my master's disease, he said to him, with a very physical air, "The business here is to supply the defect of perspiration, which is obstructed." * * * Sangrado sent me for a surgeon, whom he nam and ordered him to take from my master six good po[illegible] of bl

It is amusing to witness the splurges that some old men (Stokes, for instance) have made to save themselves from their plight when it was at last discovered that the whole thing was a mistake, and that men would recover from their ailments at least quite as well without the loss of blood. It was argued that there was a change in the character of disease that caused the change of practice, and that, by and by, the pendulum would swing back, and the lancet come in play again. O. W. Holmes (in one of his humorous poems, in which he makes Rip Van Winkle a doctor, going on with his old-style practice, after waking up ignorant that the lancet had gone out of use during his twenty years' sleep), takes our view of the matter, and considers the use and disuse of the lancet as fashions, and predicts that some future time may find

"The lancet in its honored place."

Perhaps Holmes is a better poet than prophet.

With blood-letting its chief support, the rest of the antiphlogistic regimen fell to the ground. In place of its cardinal doctrine, that it is necessary to reduce and starve a man to cure his fever, we all now acquiesce in, and act on the motto that Graves wished to have inscribed on his tombstone: "He fed fevers."

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the first effort, in order to supply the want of perspiration. Then he said to the surgeon, "Master Martin Omnez, return in three hours, and take as much more, and repeat the same evacuation to-morrow. It is a gross error to think that blood is necessary for the preservation of life. A patient cannot be blooded too much; for, as he is obliged to perform no considerable motion or exercise, but just only to breathe, he has no more occasion for blood than a man who is asleep. * * * The good priest, being quite spent, said to me, with a feeble voice, "I see plainly that I must die, and, though there is scarce a drop of blood left in my body, I don't find myself a whit the better, which is plain proof that the most expert physician in the world cannot prolong our days when their fatal period is arrived. Go, therefore, and fetch a notary, for I want to make my will." * * * I went into the house of the first notary I was directed to, and, finding him at home, "Sir," said I, "the licentiate, Sedillo (my master), draws toward his end, and wants to have his last will made, so that there is not a moment to lose." The notary, who was a brisk old man, asked what physician attended the canon. I answered, Dr. Sangrado. At that moment, seizing his hat and cloak in a hurry, "Zooks!" cried he; "let us make haste, for doctor is so expeditious that he seldom gives his patients time to send

Next in importance to the revolution that overthrew the reducing system, is that which, with a strong probability of ultimate success, is attempting to drive the mercurials from the field. Although the resistance that they make is stubborn, there is no doubt that they are fast losing ground, and must soon give up the contest at every point but one. It is conceded that the mercurial episode in the medical history of the human race has been productive of injury to its constitution, especially to its teeth and bones; but, after admitting all in this direction that the truth demands, it is thought by many that the iconoclasts are going too far, and are breaking up that which, some day, they may be glad to rebuild.

Another fashion which will only pass entirely away with the older members of the profession, and which, more than anything else, caused the abandonment of blood-letting, was the use of antimony in pneumonia. It will be remembered that it was introduced as a substitute for bleeding; and, when it was seen that men could get well of one disease without parting with their blood, it was natural for them to infer that they might from others. After doing the world this good turn, the mineral is now giving place to something else.

There are indications that the indiscriminate use of alcohol in disease is coming into fashion. If so, it may prove as pernicious in its effects as any of its predecessors.

Among minor fashions in medicine may be mentioned that which prevailed about twenty years since of giving cod-liver oil for everything—not only in chronic, but in convalescence from acute diseases. So of various things that have sprung into notice, had their brief day, and are now disused. It is the experience of everyone that he no longer buys things which he once thought that he could not do without.

(b) *The existing difference of opinion concerning the virtues of certain prominent articles of the materia medica.*

This is, to the full, as conclusive as the former topic, the discordance of opinion being so great. Below are some instances:

We have as high authority as Pres. Jenks for the oxytocic power of quinine (see the last issue of the LANCET); there are others that disbelieve it. Ergot is generally credited with the power of causing uterine contractions, as well as of controlling uterine hæmorrhage, but the writer knows a gentleman of large and long practice that denies that it has, even in a small degree, these virtues. It has, for two hundred years, been thought that calomel promoted the secretion of the liver, but Hughes Bennett concludes, from his researches on the subject, that the flow of bile is not increased by it. Colchicum is an old remedy for rheumatism, which is still believed in by some, and decried by others. Iodine is a modern discovery, which has filled a wide role in recent practice. Samuel Wilks calls it "the universal, and, I was about to add, the useless." It is right to say that it is the external, rather than the internal, use of it to which Wilks has reference. These instances of difference of opinion are sufficient for our purpose, although the list is far from being exhausted, and we pass to :

(c) *The present wide difference of opinion concerning the best methods of treatment of several formidable diseases.*

Conspicuous under this topic is the question of the best treatment for consumption. Some swear by the whiskey bottle, some by cod-liver oil, and others by inhalents. The plan of curing this and other wasting diseases by drinking fresh blood is beginning to attract attention. Albumen, under a less repulsive form than blood, is proposed by a contemporary, Dr. E. L. Shurly, of Detroit, and would seem to offer, on theoretical grounds, a better prospect of ultimate success than the use of hydrocarbons like alcohol and oil. It is to be hoped that the plan will be extensively and fairly tried. The writer owns that, although he has never seen it tried, he is, in advance, a thorough convert to it, not only on theoretical grounds, but from observations of his own, as well as of those much better entitled to be heard, with regard to the instinctive choice of food made by consumptives, even before the disease is developed. A consumptive avoids carbonaceous foods, such as fat meat, and likes lean meat, cheese, bread and milk—substances rich in albuminoids. Here speaks for our guidance the unmistakable voice of nature, which we always do well to heed.

Dysentery is a disease that is pertinent to this topic. There are several widely differing methods of treatment, among which may be mentioned the astringent, the purgative, and the ipecac plan. Anything, even the let-alone, is better than the astringent plan.

Rheumatism is a disease with numerous methods of treatment, and previous to the advent of salicylic acid, there was, among the thousand and one, nothing much better than the prescription of an eminent English physician, who, when asked what was good for rheumatism, replied "six weeks."

There is another story of a physician (this time, an American) who, after prescribing for a rheumatic friend, requested him, as a particular favor, to let him know if the medicine did him any good, for he had been a good deal troubled with rheumatism himself of late. It is scarcely necessary to pursue further this topic, for which almost every disease in the nosology will furnish an illustration, and we proceed to the consideration of:

(d) *The small number of maladies for which we have sure methods of treatment, compared with those which we do not know how to treat.*

Here is the list of diseases—not a long one—for which we have reasonably certain methods of cure:

Ague;
Syphilis;
Bronchocele;
Itch.

Here is a partial list of those—omitting some previously mentioned—for which we have no methods that can cure, or cut them short:

FEVERS:

Cholera Asiatic;
Cholera infantum;
Cerebro spinal meningitis;
Diphtheria;
Erysipelas;
Measles;
Small-pox;
Scarlet fever.
Typhoid fever;
Typhus fever;
Yellow fever;

NEUROSES:

Angina pectoris;
Chorea;
Catalepsy;
Hydrophobia;
Tetanus.

Epilepsy and neuralgia, including sciatica, are not mentioned in the above list, for the reason that they can be, in some cases, relieved, if not permanently cured.

MISCELLANEOUS:

Bright's disease;
Cancer;
Cirrhosis of the liver;
Calculus;
Diabetes;
Dyspepsia,
Hydrocephalus;
Inflammation of the brain;
Ovarian and other dropsies;
Peritonitis;
Tabes mesenterica, etc.

These lists of incurable diseases, though not complete, are enough for our purpose, and close the discussion of the four topics which divide the argument that proves that medicine is an incomplete art and science. The second part of the subject, the why it is so, remains to be considered, but first let us attend to the following obvious reflections:

Perhaps there are those that will object to so plain a statement of the imperfection of the medical art. They may ask questions like these : Will not such disclosures impair the confidence of the public in the profession, and is it the part of a friend to a cause, to parade its weak points to public view? Would it not be as well for the world, and *better* for us, to leave undisturbed the cabalistic medicine of the past? Where is the harm in letting men cling to their fetishes, since there is no injury done to them by it, and it is our livelihood?

To questions like these, there is but one answer, and that is, that science concerns itself not with policy. Its interests and the interests of the world are the interests of truth. It is never its interest to conserve delusions and mistakes, but, on the contrary hand, to remove every veil that hides the truth, and let venerable error die. The art of medicine, like all others, should rest on the basis of its own merits. There is no need to shroud it in mystery and conceal its true scientific place, for fear of losing that place; nor is there any reason for discouragement because the list of diseases that we do not know how to cure is so large. The fact that we know how to cure any, should be a source of encouragement to us, and a prophecy that soon we shall know how to cure more. Besides, the world needs the profession of medicine. All diseases cannot be classified in the two groups already mentioned. There is a large intermediate group, in which, as well as among the incurables, there is much work to be done. There is always pain to be relieved, tendencies to be watched and obviated, and systems to be supported against the strain of disease. The human race must be born—live according to the laws of nature and the accidents caused by breaking them—be sick, and die, at last. Here there is room for a profession, even if there were not a grain of medicine to be given. There is the diagnosis to make that the sick may know their condition, and regulate their affairs accordingly; there is the instruction and guidance of young and old, how to escape sickness by conforming to the laws of nature. It is not, however, wholly as teachers of sanitary science and hygiene that the medical profession will, in the future, find its field of usefulness. If the inference should be drawn, from the tone of this article, that it is intended to teach that medicine is useless, it is a mistake. The agencies of nature, electricity, heat, water, light, friction, etc., are good, and their sphere in the therapeutics of the future will be vastly greater than at present, but food and medicine are equally important in their places, and it is probable that it will be ultimately found that there is no essential difference between the two—that every true medicine is a food—and that remediation is only a form of nutrition. Besides the ground for encouragement referred to above, there is another, which is this: there has been, within a few years, decided progress made in the treatment of several diseases. One of these changes is of such pre-eminent importance that it would be wrong not to mention it in this connection. It is the method, discovered by Professor Alonzo Clark, of treating peritonitis with large doses of opium instead of drastic cathartics. If we turn to any old author, we shall find that peritonitis was always treated by bleeding and physicking. As late as 1847, Watson, for instance, had not given up this way of treating inflammation of the bowels. He knew of some cases in the practice of Bates, of Sudbury, that recovered under the use of opium, and he says that the fact "made a strong impression on his mind," but he scarcely ventures to recommend the practice. Armstrong gave opium after the bleeding, and this led Clark to drop the bleeding and rely on opium alone. It is to be feared that there are few of the gray-headed members of the profession that, if placed in the confessional, would not have reason to say "mea culpa," when they remembered that they used to treat peritonitis with cathartics. It is within the range of truth to say that the mortality, which is always great in peritonitis, is lessened under the new treatment so much that there will be five recoveries where there was one under the old, irritating, cathartic plan. Prof. Clark may be classed among the greatest benefactors of mankind that the present age has produced. Time and space fail us to mention other improvements in the art of medicine, but this is sufficient to show that there is progress, and we proceed to the second part of our theme:

The reason why the art and practice of medicine are in their present undeveloped condition;

And the question shall be answered as briefly as possible. The art lags, because from its nature it cannot go much in advance of the science; and the science lags from the inherent difficulty in making inductions, (a) as to the causes of disease, and (b) as to the effects of remedies. At present, the causes of disease are almost wholly supersensual to us, and lie in the misty regions of hypothesis. Some believe that a few of them have been discovered; others doubt if this be the fact. Unless these causes (difficulty a) are found, (difficulty b) the effects of remedies will remain an unsolved and indeterminate problem, for how is it possible to predicate anything of the unknown? If the sick man takes a certain medicine, and soon begins to recover, how do we know that he would not have done the same if he had taken something else, or nothing at all, or even have done *better* to have taken nothing? The difficulties that environ this subject are almost insuperable, and it is only by the aid of an immense number of observations, for which a single life would hardly give time for a beginning, that generalizations could be made as to the effects of remedies, while we are yet in ignorance of the causes of disease. If, on the contrary, we knew the cause of disease, we could observe how that cause is modified after the exhibition of a remedy, and eventually, by the help of a comparatively small number of observations, the induction could be made that would so far place medicine on a scientific basis. The homœopaths think to escape by the help of their "Similia Similibus," from the difficulty in which we are involved —the finding out of that which is in its very nature indeterminate. In reality, they saddle themselves with the same load—all the difference being this: instead of watching the changes that occur in the feelings of a sick man, and ascribing them to the medicine he took last, they first give their medicine to a well man, and note every feeling that he has thereafter, and ascribe it to the medicine. Their position is, in reality, more difficult than our own, and pushed to a more absurd extreme. The puerile, infantile credulity of those that say that they believe in the homœopathic "provings" is the reverse of a compliment to human nature. We will not, however, heap all the blame for credulity on the homœopaths, but manfully bear our share of it, which is too much. The disposition to draw hasty and unwarranted conclusions is too common with us. Lord Chesterfield's story of the observant traveler illustrates this vice of hasty generalization and should be remembered by every observer of the effects of medicine. When he traveled in England he found a man sick with the fever; this sick man ate a red herring and immediately began to recover. The traveler then made this entry in his book of observations: "A red herring will cure a fever." Shortly after, traveling in France and finding a native of that country down with a fever, he prescribed a red herring for him. The Frenchman ate it, and very shortly grew worse and died. The traveler then made another entry in his book to this effect: "A red herring will cure an Englishman of a fever and kill a Frenchman." Much that is written on the effects of medicine is of a piece with the conclusions of the traveler, and there are many things in the pharmacopœias that have no better title to their place than the "red herring" had to one as a cure for an Englishman's fever.

After this review of the present scientific state of medicine, let us turn our eyes to its future and ask how it is to be lifted from its present level to that of an exact science. Medicine ought to be the first of the sciences (since there is no more important thing than the conservation of the health of the human race), and it can only become that in the same way that chemistry and every other science has become what it is. Research and observation are this way, in the construction of which it is incumbent on us all to labor to the extent of our opportunities and abilities, instead of ingloriously settling down to do merely what we have been told—contentedly ignorant as to whether our informant knew any more than ourselves—as if faith was as necessary in medicine as in religion. We must work first to find the ultimate causes of disease, that being the surest clew to lead us out of the labyrinth of uncertainty in which we are now involved; but if these causes are destined to elude us, we must next study, by what light we have, their nature, and that of their effects—disease. That this way, if it does not lead us to cures, may to the abandonment of injurious methods of treatment, is shown in the reference above to the opium treatment of peritonitis. Doubtless in this way other as brilliant results may be achieved, but it is mainly on the study of etiology that our surest hopes are based. To help what we each of us can in the work, we must be wide awake to improve opportunities of observation in an independent spirit, disregarding the *ipse dixit* or authority of any man, and relegating faith to the domain of theology. If, when a road is to be repaired and made passable, every one along the line would work as much as was necessary the part opposite to his own premises, the road would soon be finished. So of the highway of science, if we wonld all work on the little part next to our own door, there would soon be a royal road leading to her temple. The time that shall see this accomplished may be distant, but its coming is sure. It may well be that many of us are too old to wait for the advent and must "die without the sight;" but it will not impair the cheerfulness with which we leave the world to reflect that we have done what we could to help forward the grand result.

Looking at the future of medicine, the prospect is not dark, but brilliantly illuminated by hope, and it is not too much to predict that, before the day of cremation comes for the younger members of the profession, the world shall have its SCIENCE OF MEDICINE.

Two Cases of Purulent Ovarian Tumor.

BY HAL. C. WYMAN, M. D., BLISSFIELD, MICH.

CASE I.—Mrs. M., aged 37 years, mother of several children, I saw first in March, 1877. She had then been confined to her room for the preceding three months, on account of what she supposed was pregnancy and heart disease. Eight months previous to my visit, she first noticed enlargement of the lower abdomen, and cessation of the catamenia. Five months after this, increased size of the abdomen, œdema of the lower limbs, with functional disturbance of the heart, rendered her incapable of performing her usual household duties. With the advice of a physician, she kept her room, and sought rest, expecting to be confined at an early day.

At the time of my visit, she had been for three weeks unable to sleep in the recumbent posture; was having chills and hectic daily, and resembled more closely one suffering pyæmia than a woman about to be confined. Her pulse was running 120 beats per minute; temperature, 102° F.; tongue furred; diarrhœa and profuse sweating. The abdomen was much larger than is usual at the ninth month of pregnancy, and fluctuated distinctly on percussion over its anterior aspect. Percussion elicited dullness over all except a small area in the epigastrium, and above the crest of the right ilium. Examination by the vagina found the os uteri well up in the vaginal canal, and the body of the uterus was so high that it was necessary to draw it down with a hook, and examine with the digit in the rectum, in order to ascertain its condition. It was found smaller even than in the unimpregnated state. Uterine pregnancy was, of course, excluded. Her lower limbs were œdematous to a degree not infrequent in healthy pregnant women. The urine contained a small quantity of albumen, but was free from casts. Respiration was very difficult and irregular. In the heart were heard anæmic murmurs, with fair rhythm. Auscultation of the tumor revealed absolutely nothing, and, as the patient had experienced none of the symptoms of pregnancy, except checked menstruation, distension of the abdomen and œdema, I felt safe in excluding extra-uterian pregnancy. I introduced a small trocar, to further the diagnosis, and evacuated a common wooden pailful of sero-purulent fluid, giving immediate relief to the embarrassed respiration and circulation. After the fluid had ceased passing by the canula, the abdomen yet contained a tumor about the size of an orange, and a quantity of fluid free in the abdominal cavity. This tumor could be easily moved to any part of the cavity, and in intimate connection with it was something which I took to be the collapsed wall of the cyst just evacuated. A bandage was now applied to the parts, and a hypodermic injection of morphia given. Iron and quinine were also prescribed, and the morphia repeated sufficiently often to maintain physiological rest. Milk, eggs and beef tea were used liberally.

Under this treatment, she gradually improved, but, before a week elapsed, her abdomen began to distend, and another tumor was distinctly palpable and increasing. Ten days after the first puncture, I had little difficulty in diagnosing a multilocular cyst, freely movable in the abdominal cavity, and advised the patient's consent to its immediate removal. With patient's temperature at 101° F., pulse 120, tongue smooth, appetite fair, and absence of œdema, submitted her to chloroform anæsthesia, and removed an ovarian multilocular cyst, containing pure pus, after the usual method. Adhesions were almost entirely absent, and very slight and to the omentum. The pedicle was short, and with difficulty treated with the clamp. Little or no shock followed the operation. Patient did well until the sixth day, when the temperature rose, the tongue became furred; there was anorexia and vomiting, followed by death on the morning of the eight day. *Post mortem* forbidden.

Appearances did not indicate any untoward changes in the abdominal cavity subsequent to the operation, but everything pointed to that obscure combination of conditions that we call septicæmia, etc.

The tumor consisted of two large primary cysts, containing pus. These cavities were studded with innumerable small cysts, not larger than cherries, and containing a clear albuminous fluid. The exterior of these cysts, within the cavities of the larger ones, was covered with a deposit of fibrin.

Case II.—Mrs. G., aet. 29, mother of one child, aged 5 years, came under my observation in the lying-in chamber, five years ago. She was aware that she had ovarian tumor two years before my visit, and was now fearing that the most disastrous consequences would result from her confinement. Had been an inmate of Harper Hospital, in the service of Prof. Jenks, of Detroit, who was the first to diagnose the tumor.

Her labor was easy and natural. Suffered no great inconvenience from the tumor until two years later, when it had acquired such enormous proportions that it seriously embarrassed the functions of the lungs and heart, necessitating its immediate removal. To this, however, patient refused consent, but was willing to submit to tapping.

By means of a medium-sized trocar, I drew off sixty-two pounds of fluid, which clouded under heat. She recovered promptly from this operation, and I saw or heard nothing more of her until one year later, when I found her in a condition similar to that described above, and repeated a second time the operation by tapping, with the same results. Five months ago, was summoned to attend her a third time. Found her suffering intensely from the presence of the tumor. Careful examination made me suspicious of pregnancy. Had Drs. Hamilton and Peters, of Tecumseh, visit her in consultation. They were of opinion that pregnancy of fifth or sixth month complicated the case, and counseled tapping in preference to more radical treatment. An enormous quantity of fluid was withdrawn, which was of the same appearance (sero-albuminous) as that withdrawn at the previous operations. Nothing unusual, further than the collapsed cyst and the gravid uterus, was to be found in the cavity of the abdomen or pelvis. Patient did well until the third day, when she aborted, with considerable hæmorrhage. Recovered from this with improved strength and appetite.

Without producing any immediately serious results, the cyst began to refill, and, in eight weeks, assumed such proportions that its removal, or evacuation of its contents, became imperative. Finding her, eight weeks after the miscarriage, unable to sleep, with occasional slight rigors; temperature, 100.5°; pulse, 120; poor appetite, and other symptoms indicating rapidly failing powers, I advised her to submit to the operation of ovariotomy as the only measure that offered the slightest chance of a return to health. She willingly and gladly consented, and, in the presence of Drs. Hamilton, Peters, Parker and Reynolds, I removed a monocystic tumor, having a very broad and short pedicle, and extensive omental and intestinal adhesions. Repeated microspopic fields of its contents failed to reveal anything but granular pus cells and an occasional red blood disc. The entire quantity of pus weighed fifty-four pounds; the cyst proper, four pounds. Patient rallied promptly from the operation, expressed herself well pleased with the results, took some nourishment, but, seventeen hours later, died from exhaustion.

Autopsy, twelve hours after death, revealed no untoward condition in the abdominal cavity. Death evidently came before nature undertook the healing of the wounds, and seemed to have resulted from the abstraction of such a large quantity of fluid from the body. To the eye she appeared to pass away like one dying from hæmorrhage, and yet not a fluid ounce of blood was lost during the operation.

En Resumé.—The first case is remarkable for its rapid development, and the spontaneous formation of pus in the cavity of the cyst previous to tapping. The few who have written on purulent ovarian cysts have ascribed the presence of pus to inflammation, caused by the trocar; but, in this case, we have no such history. The constitutional symptoms all pointed to the presence of suppurative disease, which seems to have begun about five months after she first noticed the tumor. There is, further, no history of fall or other accident that could have induced the inflammation. It also brings up the question of operation in cases of inflamed cyst. The termination of this case was gloomy enough, but the result might have been the same had pus been absent. The patient died in the same manner as many of the cases do that are pronounced most favorable for operation.

In Case II, the fatal result was undoubtedly due to the exhaustion caused by the large and very rapid accumulation of pus. In eight weeks, fifty-four pounds of pus gathered in the sack formerly occupied by ordinary albuminous fluid. Case II is also interesting as having involved the question of operation during pregnancy. Abortion followed tapping, and the pus also followed. Do not think removal could have induced any worse results. At the time I was unable to get any information on the point. Could learn of no one who had operated intentionally during pregnancy, and those who operated unintentionally, operated fatally.

A careful reading of the literature of the subject gave little positive information. I fear that ovariotomists have not recorded their bad results as faithfully as they have their good ones. English medical writers have said but little about the occasional finding of pus in ovarian tumors. The whole literature, in fact, so far as I am able to learn, consists of two or three brief pamphlets, of which the best and most comprehensive is by Dr. James R. Chadwick, of Boston, entitled "Pus in Ovarian Fluids."

That grave questions may hinge upon the character of the ovarian fluid is manifest by the result of the two cases just described; and it is interesting to know if removal of suppurating cysts improves the chances of cure. Dr. Munde, of New York (*Am. Jour. Med. Sciences*), mentions a case treated successfully by operation. He advises the removal of purulent cysts, and quotes from the Italian journals the successful removal of these tumors even when the peritoneal cavity was in a state of putrescence.

Keith, the Scotch ovariotomist, mentions ten cases of suppurating cysts, and advises removal.—(*Edinburg Med. Jour.*)

Baldy (*accidents de la ponction abdominal des kysts de l'ovaire*), Gallez (*Histoire des Kysts de l'ovaire*), Speigleberg (*Ueber perforation der ovarien kystoner in die bauchhöle, archiv für gynækologie*, 1870), who have made extensive studies of ovarian cysts, allude to the occasional presence of pus, but have nothing to say about the causes leading to its production, or the results of operation for the removal of such cysts. Camus (*Revui Medical*, 1844,) enumerates several cases of suppurating cysts which evacuated spontaneously through the abdominal parietes and rectum, and were in that way cured.

Kiwish (*Klinische Vorträge*) also mentions a few cases that resulted in spontaneous healing by suppuration.

In view of the fact that numerous cases have recovered by operation, and the very few on record that have recovered spontaneously, experienced operators would doubtless advise the removal of purulent cysts, the same as other ovarian cysts ; but, with what percentage of recoveries, recorded successes and failures have not been sufficiently numerous to form any basis for predicting. For this reason, I have communicated this account of an attempt to cure two cases I believe experienced ovariotomists would not regard impossible of cure, and hope that every surgeon who has been nearly as unfortunate in his attempts at cure, will range his ill-successes into ghastly line, and give a better and more useful account of the causes and condition which led to fatal issue. Within my personal knowledge I can recall nearly a dozen fatal cases of ovariotomy in the hands of as many different operators—every case most cautiously smothered and forgotten.

A Case of Spindle Cell Sarcomata in the Region of the Forehead.

BY DR. HERMAN P. V. PETERSHAUSEN, DETROIT, MICH.

Mrs. W., of New York City, aged 78 years, noticed, somewhat over three years ago, an insignificant swelling in the region of the glabella. Several months afterwards she found that it was increasing, but so slowly that she did not consider as necessary to apply for its removal any other than the homœopathic remedies ordered by her family physician. At the end of July, 1877, Dr. Frauenstein was called to examine the tumor, which a short while before commenced to grow more rapidly. The doctor found that the swelling had the size of a hazelnut, while in the beginning of September it had gained already the size of a walnut. Besides this he noticed some small protuberances in the region of the nasal eminence and below it. The main tumor proved to be connected already with the skin when Dr. F. first saw it, but it was not attached to the periosteum of the frontal bone. The growth did not cause any pain, and only its recent development made the patient somewhat anxious. As to the malignity of the tumor the doctor did not come to a definite opinion. He concluded that it probably was formed by the proliferation of connective tissue in the neighborhood of sebaceous glands and that it might be of a suspicious nature. He proposed, therefore, its removal, to which the patient consented.

On September 7, 1877, the doctor dissected the principal tumor, being assisted by Dr. Kudlich. Though a considerable part of the skin had been cut out, the wound could be well united, and did heal by first attention. The tumor was sent to me for examination. A section through the growth revealed that there were imbedded smaller tumors in it, being of the size of a pea or larger. They had a milky-white color and seemed to be incapsulated. It was found by the microscope that these tumors were rich in spindle-shaped cells; some of them having three prolongations. There was generally only one nucleus in each and no pigment. All the cells were very fragile and appeared to be arranged in rows. The intercellular substance in which the cells were closely embedded formed a delicate network to be distinguished very easily after the preparation was brushed out. The capsule by which the smaller tumors were surrounded consisted of long spindle-shaped connective tissue cells and of intercellular substance, in which numerous polyhedric cells were embedded. The adjacent connective tissue was partly infiltrated by spindle-shaped cells. They were probably carried to these spots by the blood vessels, of which many were blocked by them.

As the entire growth was infiltrated, there was good reason to suspect that near the newly formed scar there might be deposited cells which soon would form malignant tumors. A recurrence of the tumor could be expected with the more certainty as there had been a greater afflux of blood to the part operated upon while healing. Besides there was much probability that the smaller tumors in the region of the nasal eminence were sarcomata.

About five weeks after the operation had taken place there were observed symptoms of infiltration in the scar. Then Dr. F. concluded to remove not only all the tumors remaining and the newly infiltrated parts, but all the integument of which infiltration might be suspected. The extirpated skin had the shape of an inverted Y (⅄), whose wings were taken from the root of the nose. Moreover, every tissue of a suspicious character was taken away by the scraper. The defects thus made were pretty well repaired by a union of the adjacent integument after lifting it by subcutaneous dissection and sliding the constructed flaps together. Only a small triangular space near the inner angle of the left eye remained uncovered and had to heal by granulation. The patient had after the operation only little fever for a few days. The wound healed nicely in the course of four weeks, and up to the present day (Dec. 10, 1878,) more than *one year after the last operation*, no recurrence of malignant tumors has been observed.

By the microscopic examination of the newly removed parts the suspicion was confirmed that the smaller tumors, as well as the infiltrated scar, consisted of sarcomatous cells, formed and arranged like those already described.

Enucleation of an Eye for Sympathetic Irritation—Bony Growth Inside the Enucleated Eye.

LEARTUS CONNOR, M. D., LECTURER ON OPHTHALMOLOGY AND OTOLOGY IN DETROIT MEDICAL COLLEGE.

[illegible]er 15, 1878, Mr. Wm. H. Barnum, of Harrisville, [illegible] himself at the Detroit Medical College clinique.

He was a carpenter by trade, American by birth, married and about thirty-three years old. As to his general health he stated that he had never experienced any severe illness. Fifteen years ago his left eye was destroyed by the explosion of a gun cap. An ill-fitting artificial eye was applied to the stump; but after several years the contraction of the lids sufficed to crowd it out. A smaller one was substituted, but last winter this, too, was crowded out. For a year his right eye has been gradually failing, so that since last winter he has been unable to read nights. Further, it has often pained him during the same period, and more of late. At present there is constantly an uneasy, disturbed feeling in it.

Examination of the stump of the left eye revealed the following condition: Cornea was entirely gone, a vascular scar-like tissue occupying its place. Eye-ball greatly atrophied. Orbital and palpebral conjunctiva of both upper and lower lids were glued one to the other by adhesions, except at a space of about a third of an inch at the outer portion of the upper lid. So extensive were these adhesions and so profound the destruction of conjunctival tissue that I deemed it impracticable to attempt any operation for the relief of the symblepharon so as to permit the wearing of an artificial eye.

In addition to the symptoms of sympathetic irritation of the sound eye already mentioned, the ophthalmoscope revealed considerable engorgement of the optic papilla and retinal vessels. In brief, I regarded this irritation so threatening that I was unwilling to permit the patient to return to his distant home without removing the source of the danger. The matter being fairly placed before him, the patient consented to the operation.

Accordingly, the patient was placed under the influence of ether, when, assisted by Drs. Chapoton and Robertson, the eye was enucleated in the ordinary manner. The only difficulties in the operation were: (1). The changes in the lids rendered it impossible to insert a speculum. In lieu of this the lids were held apart by the fingers of an assistant. (2). The constant inflammation of the lids had caused very firm adhesions between the conjunctiva, the capsule of Tennon, the muscles, and the sclerotic. With a little patience these were separated and the old stump of an eye removed. The orbit was plugged with a carbolated sponge, retained by the compress bandage. The patient rallied well from the operation and suffered no pain after the removal of the sponge. Twice a day the wound was syringed with carbolated water, and a cloth wet with the same kept over the eye. The bowels were kept open daily, and five grains of sulphate of cinchonidia given night and morning.

The patient continued to improve until the seventh day, when he was discharged at his own request. At this time all the symptoms of irritation in the sound eye had disappeared. He could read at night and in the day as long as he wished without any unpleasant sensations.

On examination of the enucleated eye we found it soft to the touch. From front to back were ridges in the sclerotic, produced partly by its atrophy and partly by the sloughing following the primary injury and the consequent union of the edges of the sclerotic at the sclero-corneal junction. On section of the sclerotic in the antero-posterior and perpendicular meridian, only traces of the iris could be seen, and, of course, no trace of a lens. Remains of the ciliary processes were observable, as also the choroid lining the sclerotic. On cutting through the choroid a peculiar hard mass was seen to fill most of the interior of the eyeball. At the posterior part of this mass, and just anterior to the choroid, was a hard, cup-shaped disc lining the posterior third of the eyeball. Closer examination showed this to be perforated behind at the entrance of the optic nerve and to have irregular edges anteriorly. Filling this cup and the rest of the eyeball was a mass that seemed part blood vessels and part connective tissue. Thus it will appear that this hard disc took its origin from the inner part of the choroid. Part of the disc grated on the application of forceps, and part seemed to resemble cartilage.

Microscopical sections of this disc were made by my friend, Dr. Petershausen, and in all the harder parts bone cells and canaliculi were plainly demonstrable. Specimens of these sections are in my possession and clearly demonstrate that genuine bone may have its origin in the choroid of the eye.

The probable occasion in this instance of its formation was the long continued irritation of the eyeball from the wearing of ill-fitting artificial eyes.

The case is of interest:

(1.) In showing how speedily symptoms of sympathetic irritation disappear when the diseased eye is removed.

(2.) In illustrating the effects of wearing artificial eyes that are badly fitted, or from any cause produce considerable irritation.

(3.) In demonstrating the presence of true bone cells and canaliculi in an intra-ocular growth.

(4.) In confirming the observations of Dr. H. Knapp, which showed that while calcareous formations might take place in any tissue of the eye, bone formations are only formed from the choroid.

Abstracts from Exchanges.

PREPARED BY JUDSON BRADLEY, M. D., ALBERT B. LYONS, M. D.,
E. A. CHAPOTON, M. D.

Practical Medicine.

WATERY DISCHARGE FROM THE NOSTRILS.—Sir Jas. Paget (*Brit. Med. Jour.*, Dec. 7, '78) reports the following: A healthy woman receives a heavy blow over the left frontal sinus, Nov., 1876. In January, 1877, she had an intense headache for a day. In February, 1877, she had a severe mental shock, and, in May, 1877, watery fluid began to drop steadily from the left nostril. From then until now it has continued, with two exceptions, viz.: a fortnight in May, 1878, it ceased while she was taking morphia for bronchitis, and on one other occasion it ceased for a night. A small drop fell or ran down the lip every few seconds, and about four ounces have been collected during an afternoon and evening. Generally, the quantity was uniform, but much exertion or straining increased it. The fluid looked like pure water, which, on long standing, deposited a minute quantity of a greyish substance. The fluid was alkaline, contained proteid matter, albumen, chloride of sodium, phosphates, and a slight trace of iron; sp. gr..1004 to 1009. Dr. B. Carter reported a similar case of dropping from both nostrils, occurring in an old man affected with gout. Dr. J. Althaus reports a case in which this dropping occurred in connection with the disease of the fifth nerve. He suggests that, in Paget's case, there was a neuritis of the nasal twig of the trifacial, followed by its paralysis. Hence the watery flow.

HEADACHES, THEIR TREATMENT.—Dr. W. H. Day (*Brit. Med. Jour.*, Nov. 16, '78) makes some excellent suggestions on the subject of headaches. He will be most successful in their treatment who, while employing special remedies for immediate relief, does not lose sight of the general plan of treatment needed to remove the cause of the same. Sound diagnosis is essential to success in treating headaches. If the headache can be traced to any source of irritation in the digestive apparatus, it should be removed, and the organs of secretion and excretion put in proper order. Particular attention should now be given to the selection of remedies which exercise a tonic and calmative effect upon the cerebral circulation. In an overworked brain, calmative remedies should be chosen, as the bromides of potassium and ammonium, chloral hydrate and morphia hypodermically. Of tonic remedies we have quinine, iron, strychnia, phosphorus, belladonna and digitalis, each drug possessing some special property which fits it for use in particular cases. In some nervous headaches, an emetic will act like magic; so, also, a mustard leaf at the nape of the neck, the feet and legs being immersed in hot water. Neuralgic headaches are well treated by cod-liver oil, quinine, arsenic and phosphorus. For periosteal headache, the iodide of potassium will be required in large doses. For gouty or rheumatic headaches, the iodide of potassium, colchicum, alkalies, ammonia, lithia and mercurials, with change of diet and place, will severally aid us. In the treatment of all headaches, the head should be elevated at night, and the pillow be hard.

In every severe headache, rest is one of the first and most important remedies. The brain, when excited, as much needs quiet and repose as a fractured limb or an inflamed eye, and it is plain that the chances of shortening the seizure and arresting the pain will depend on our power to have this carried out effectually. Then practically we are to ever remember that behind a simple headache there may be some lesion of unknown magitude, which may remain stationary if quietude only can be had.

HOW TO COUGH.—To some persons, coughing is harmless, but to others it is frought with many dangers. It is, therefore, important to teach those liable to be injured by too severe or prolonged efforts at coughing how they may accomplish their purpose easily, safely and quickly. Dr. J. M. Frothergill (*Phil. Med. Times*, Dec. 7, 1878) says: "It must be insisted upon that the chest be well filled with air before the cough is let loose; that is, the reflex act must be inhibited by the exercise of the will, until the chest be well filled with air, before the cough is let loose. Such full inspiration is effective not only in removing the source of the irritation, but it usually causes other masses of mucus and charcoal to slide from their seat, and thus to set up further cough for their removal. But, if the full inspiration plan be followed, these masses are readily and quickly expelled." Of course these directions are of use only in such coughs as are for the purpose of removing some offending matter from the air passage.

INTEMPERANCE IN SWEDEN AND NORWAY.—The *Bulletin de l'Agriculture* (*L'Union Medicale*, Nov. 16, 1878) relates the following original method by which drunkards are treated in Sweden and Norway: Chronic drunkenness is punishable by imprisonment. The only food given to the drunkard whilst he is in jail is bread and wine, the former broken up and soaked in the latter at least an hour before it is served.

The first day the prisoner accepts his meals with great pleasure; the second day, the bill of fare, according to his ideas, is rather limited, and the following days it is only with increasing difficulty that he can force himself to eat a morsel. After eight to ten days of this treatment, such a distaste for this food arises that the prisoner condemns himself to total abstinence.

After leaving the jail, drunkards, with very few exceptions, are so radically cured that even the odor of alcohol produces in them an invincible disgust.

POISONING BY POTASSIUM CYANIDE.—Cases of poisoning by this agent are sufficiently rare to excite interest. The case reported last April, in the *Philadelphia Med. Times*, was not as complete a record of the effects of the poison as one found related in the *Berl. Klin. Wochensch.*, 1878, by Dr. Mueller Warneck, of Kiel. As usual, the patient was a photographer, for only photographers and chemists are ever poisoned by this agent. He swallowed about four ounces of a solution containing about forty-five grains of potassium cyanide. The principal phenomena observed were about as follows: Sudden fall, with loss of consciousness, vomiting of food, and of a liquid having the odor of bitter almonds, profound coma, clammy sweat, cyanosis, coldness of the extremities, lids half closed, eyes turned upwards and outwards, pupils strongly dilated, jaws locked, sanguinolent saliva, muscles relaxed, and sensibility and reflex action abolished. Respiration irregular, now hurried, now slowed. Pulse 120, small and uneven. Temp. 96.8°. The treatment was as energetic as the symptoms demanded. Dr. Warneck gave immediately a subcutaneous injection of two grammes of sulphuric ether, and washed out the stomach until no odor of bitter almonds could be detected in the returning stream. Respiration appeared about to stop forever, the pulse became smaller still, there was a menace of pulmonary œdema, and, notwithstanding two more injections of camphorated ether and artificial respiration, still no improvement manifested itself.

The patient was then placed in a bath of 105° F., whilst iced water was poured over his head and neck, and from the first pitcherful he commenced to make deep inspirations. The respiration became gradually more regular, and all the symptoms dispeared after a bath of an hour's duration. Another injection of two grammes of ether and 0.20 of camphor was given, and the patient was placed in bed. General muscular weakness and troubled speech continued for some time; but, after two months, the former had passed away, whilst some difficulty of articulation still remained.

PROPYLAMINE IN CHOREA.—(*Le Mouvement Medical. Med. Record*, Nov. 30, 1878.) Dr. Parkhauser recommends propylamine as a prompt and effective remedy for chorea. He claims that it effects a cure in three or four days ; relapses are cured in one or two days. He gives it in doses of from 15 to 19 grains per diem. This quantity is dissolved in four ounces of water and one ounce of syrup, and a spoonful is given every hour. In his hands, three or four grammes, administered in as many days, have invariably produced a complete cure.

THE IMPORTANCE OF THE IMMOBILIZATION AND PARALYSIS OF THE DIAPHRAGM AS A SIGN OF THE GENERALIZATION OF PERITONITIS.—(M. Layronne. *Lyon Medical*, Nov. 18, 1877. *L'Union Medicale*, October 15, 1878.) The author insists upon this sign, which has a great prognostic importance. This paralysis presents itself under two forms ; in one, the diaphragm remains simply immobile in both periods of respiration ; in the other, whose pathogenesis has been formulated by Duchesne, the diaphragm is not immobile ; it is raised instead of lowered during inspiration, whilst the opposite takes place during expiration. As long as the hand applied upon the epigastric region depresses the latter easily, and the operator feels his hand lifted up isochronously with the respiratory act, the idea of general peritonitis need not be entertained.

OPIUM, BELLADONNA AND ACONITE.—(M. Jules Simon, *Lancet*, July, 1878; *Am. Jour. Med. Sciences*, Oct., 1878):

1. Action on alimentary canal; opium causes thirst, dryness without acrimony, want of appetite, nausea, vomiting, constipation. Belladonna, thirst, dryness without acrimony, nausea, vomiting and diarrhœa. Aconite, dryness, sensations of pricking and burning of the tongue; in full doses, salivation, vomiting and diarrhœa.

2. Action on circulation.—Opium acts as a stimulant, causes diminution of pressure, though it is sometimes without action, and, in large doses, causes acceleration of the pulse and collapse. Belladonna acts as a sedative, lowers strength, retards frequency of pulse, and produces a febrile state of the system. Aconite acts as a sedative, diminishes arterial tension, renders the face pallid, retards frequency of the pulse, and stops the heart in diastole.

3. Action on Respiration.—Opium allays dyspnœa, when present, by diminishing bronchial secretion; large doses cause collapse. Belladonna calms down excited respiration, diminishes secretion, and, in large doses, renders respiration spasmodic and irregular. Aconite retards respiration by its direct action on the nerves.

4. Action in Febrile States.—Opium augments the cutaneous secretions, produces general malaise, erythema and eruptions. Belladonna produces neither sweating nor general discomfort, raises the temperature, and sometimes causes scarlatina-like eruptions. Aconite lowers the temperature.

5. Action on the Secretions.—Opium diminishes the quantity of urine and secretions generally. Belladonna causes augmentation of the renal, and diminution of the bronchial secretion. Aconite increases the urinary and diminishes the bronchial secretions.

6. Action on Nervous System.—Opium acts chiefly on the cerebro-spinal system, belladonna on the same, and aconite on the spinal cord. Opium causes somnolence, sleep, intoxication, vertigo, muscular debility, diminution of common sensibility, contraction of the pupil, diminution of the activity and vigor of reflex actions. Belladonna causes sleeplessness, gay or furious delirium, hallucinations, muscular agitation, diminution of the sensibility of the face, dilated pupils, and remarkable diminution of the reflex acts. Aconite leaves the intellectual faculties intact, but causes muscular torpor, anæsthesia, hallucination of the senses, diminution of reflex actions, and produces slight dilatation of the pupil.

SPREADING QUINSY—ITS ESSENTIAL FEATURES.—In addition to the above name, this disease is known in England by the terms "false diphtheria" and "cynache pharyngea." D. C. B. Fox, Medical Officer of Health in one of the eastern counties of England, has had a considerable experience in observing it during several epidemics. From this study (*Brit. Med. Jour.*, Dec. 7, 1878), he gives the following facts:

The disease consists, essentially, in an inflammation of the tonsils, which extends more or less into the pharynx, and sometimes to the neighboring submaxillary and other cervical glands. Although yellowish spots are sometimes seen on the tonsils from an accumulation of mucus in the follicles of these glands, no ash-grey, tough, leathery membrane is ever seen during the course of the disease. The individuals affected present an anæmic appearance. The disease is communicated from one to another, generally through the medium of schools, etc. Unlike diphtheria, it is but seldom fatal, unless those who suffer from it have been long exposed to most unwholesome conditions. It is never followed by paralysis of sensation or motion, as diphtheria often is. It is not accompanied by albuminuria. The pulse is full, as is noticed in cases of acute quinsy, whereas in true diphtheria it is small and feeble, indicating great prostration. It presents characters dissimilar from those exhibited by cases of scarlet fever, without the rash, from which it does not confer an immunity. It may prevail in a district where no true diphtheria is known. Its average duration is about ten days. It is essentially a filth disease, being always associated with some organic impurity of air or organic impurity of water. Overcrowding, saturation of soil around dwellings with slop-water, and employment of pond water for drinking purposes, are the most common insanitary conditions found in connection with infected houses.

EARLY PHTHISIS—ITS TREATMENT.—Dr. J. Milner Fothergill (*The Practitioner*, Oct., 1878), makes some common-sense suggestions respecting the treatment of early phthisis. Attention to the stomach and bowels is scarcely less essential in importance than the treatment of night sweats. Truthfully it may be stated that it is more important to study the tongue than to go over the chest with the stethoscope. The latter may exhibit the physician's skill in diagnosis; the former, as it is attended to or not, may save or lose the patient's life. When the tongue is covered with thick fur, it is useless, or nearly so, to give iron and cod-liver oil; for the tongue is the indicator of the state of the intestinal canal, and absorption through the thick layer of dead epithelial cells is well nigh impossible. In this state, it is well to give a compound calomel and colocynth pill every second night, and to order a mixture of nitro-hydrochloric acid or phosphoric acid, with infusion of cinchona, three times a day, till the tongue clears. At other times, the tongue is raw, bare, and denuded of epithelium. Here it is of cardinal importance to put the patient on a mixture of bismuth with an alkali and a milk dietary. Often milk and seltzer water will agree where the milk alone is too heavy and constipating. When the tongue has become normal, then iron and cod-liver oil may be administered. All drains from the alimentary canal must be carefully checked. In the early stages of phthisis, diarrhœa is readily checked by a pill of half a grain of sulphate of iron and one grain of extract of opium. As a drink, rice-water is indicated in such states.

In women, menorrhagia and leucorrhœa should be most carefully looked for and stopped.

The significance of hæmoptysis depends upon its casual relationships, and its true treatment is founded upon a correct appreciation of its concomitants and associations. Blistering and strapping of the chest are useful expedients in a certain number of cases. Large, well-ventilated rooms are indispensable. Diet must be nutritious and easily assimilable. Of cough mixtures in general it may be said that they are likely to do more harm than good. Hydrobromic acid, with spirits of chloroform, makes a valuable remedy in affording relief from useless and harrassing coughs. The night sweats are to be met by belladonna and oxide of zinc, or aromatic sulphuric acid.

SCARLATINA AND DIPHTHERIA—ARE THEY CONTAGIOUS?—Dr. E. M. Snow (Report of Registrar, of Providence, R. I.) says that there is no certain or probable evidence that either scarlet fever or diphtheria usually spread through contagion. Diphtheria is certainly a filth disease, and usually spreads from the influence or effects of foul air arising from localized filth. The contagion of diphtheria never produced extensive prevalence of the disease without the presence and aid of this local filth, and there is reason to believe that the disease often arises and becomes prevalent without the aid of any personal contagion.

The belief is also growing that scarlatina is also a filth disease, and very similar in the conditions of its prevalence to diphtheria. Pure air, personal cleanliness, and abundant sunlight, are the best preventatives of these as well as other filth diseases.

Nervous Diseases.

INSANE CRIMINALS.—Dr. R. S. Dewey (*Jour. Nervous and Mental Diseases*, Jan., '78) in an elaborate article discussing the provisions made for insane criminals, concludes: (1.) Every community has among its insane a class of "insane criminals," as distinguished from innocent and reputable insane persons who have committed crimes. They are in large part convicts, but there are many unconvicted criminals among them. (2.) The number of the former class is large, the proportion among convicts being probably not less than one in fifty or sixty. (3.) There is no proper or suitable provision for this class. (4.) This lack of provision leads to great injustice and injury to the other classes of insane and to the community at large. (5.) The establishment of a special asylum for these wherever practicable would be a measure of justice, humanity and economy, and the preferable location for the same, when it cannot be an entirely independent institution, is in connection with the State Prison.

THE SYMPTOM OF TENDON REFLEX IN LOCOMOTOR ATAXIA.—Westphal and Erb have described two forms of reflex tendnious phenomena as occurring in the early stage of locomotor ataxia. Thus if in a healthy person the ligamentum pattellæ of the loosely hanging leg, or the tendon of the quadriceps femoris, be struck a smart blow with the side of the hand a more or less violent kick will follow, while if the tendon of Achilles be struck in the same manner the heel will be raised. In locomotor ataxia it is claimed that these phenomena are absent. Dr. A. M. Hamilton (*Boston Med. Jour.*, Dec. 27, '78,) reports eight cases of this disease. In these cases one half present this symptom, but in the other half the tendon reflex is not only present, but in some cases markedly increased. Thus it would appear that this symptom is of less value than has been claimed. But when it is present coupled with the so-called lightning pains, plantar anæsthesia and dimness of vision, it has a great force, even in view of Dr. Hamilton's observations.

SCLEROSIS OF THE SPINAL CORD: WHAT IS IT?—Much diversity of opinion exists with reference to the proper answer to the above question. As one of the best that we have met we give that of Dr. J. Althaus (*Brit. Med. Jour.*, Nov. 9, '78): (1.) Sclerosis may be both primary and secondary. (2.) Where it is primary it is, as a rule, bilateral and only exceptionally confined to one half of the spinal cord. (3.) Primary sclerosis, such as we see it in tabes dorsalis and lateral spinal paralysis, consists of an extremely chronic inflammation of the nervous matter, which leads in the course of time to disintegration and wasting of nerve cells and fibres, thickening of connective tissue and formation of amyloid bodies in the meshes of that tissue. (4.) Secondary sclerosis is a simple degenerative process arising from failure of nutrition, but leading in the end to the same pathological appearances as the primary or inflammatory variety of the affection. (5.) Secondary sclerosis is frequently unilateral, more especially where it occurs after hemorrhage into the brain from rupture of miliary aneurisms of the cerebral arterioles, and where it affects only that portion of the spinal cord which corresponds physiologically to the diseased hemisphere. (6.) Secondary sclerosis occurs likewise after hemorrhage into the substance of the cord and acute myelitis. (7.) Disseminated insular sclerosis or Charcot's disease is a chronic interstitial myelo-encephalitis, affecting chiefly the neuroglia of the central ganglia and the lateral columns of the cord, and leaving the cylinderaxis more or less intact. (8.) Lateral amyotrophic sclerosis, the chief symptoms of which are motor debility, atrophy and rigidity of the muscles, consists anatomically of wasting of the ganglionic cells of the anterior cornua combined with sclerosis of the crossed pyramidal portion of the lateral column.

LATERAL SCLEROSIS OF THE SPINAL CORD.—Dr. J. Althaus (*Brit. Med. Jour.*, Nov. 9, '78) gives an excellent account of this affection, from which we extract the following: The affection begins in the posterior portion of the lateral columns, called the crossed pyramidal column, composed of fibres derived from the opposite cerebral hemisphere. In this disease this column is found studded with wedge-shaped grey patches reaching anteriorly as far as the lateral column proper, exteriorly as far as the lateral column proper, and interiorly as far as the posterior cornua. True paralysis with muscular spasms and rigidity are characteristic symptoms of this disease. These are directly referable to the fact that all voluntary movements must pass through the diseased columns in their passage from the brain to the muscles. At first the loss of power is slight. The patient feels week in the legs and has a difficulty in going up and down stairs; after walking a short distance he is greatly fatigued. There is great difficulty in lifting the feet from the ground; they are apt to shuffle along it, and thus to wear out the soles of the shoes first at the toes. Soon the patient takes to sticks or crutches. Coincident with this loss of power we have motor irritation, shown by twitches, cramps and convulsions, which are apt to occur after fatigue, but often come on without any apparent exciting cause and with considerable regularity. After a time the muscles assume a degree of rigidity which renders voluntary movements more difficult and offers resistance to passive movements. The legs resist flexion, extension and abduction; they ultimately become fixed in extension and adduction, and the foot assumes the position of varo-equinus. In walking the patient seems, as it were, fixed in a vise. He has no difficulty in standing, but the legs seem so stiff that he is almost unable to get the feet from the ground; he walks on tiptoe; the whole body seems to join in the spasmodic effort and is thrown forward in order to aid the action of the legs. The tendon reflex symptom of Erb is greatly increased. Thus if the patient affected by lateral sclerosis stamp upon the floor with his foot the whole limb is thrown into a state of tremor which may last for hours. This increase of tendinous reflexion is due to the cessation of arrival of inhibitory influence from the brain in the muscles from interrupted connection. The mode of development of this disease is, as a rule, extremely chronic, extending over years or decades. It usually begins in the lumbar enlargement of the cord. Its progress is by fits and starts. In a variable time it extends upwards to the cervical enlargement. Generally before the medulla is reached the patient dies of some other disease. The chief cause of this disease is taking cold. It occurs between the ages of thirty-five and fifty. The prognosis is in a general way unfavorable. Generally we must be satisfied to arrest the disease. The prognosis will vary with the ability or disposition of the patient to adopt the mode of life most conducive to recovery. In treatment we must have *rest* and use ergot and nitrate of silver, and other remedies as the general state of the patient calls for them.

DISEASES OF THE SPINAL CORD—THEIR ACCURATE LOCALIZATION.—Erb, in his work on the spinal cord (*Chicago Jour. Nervous Diseases*, Oct. '78), says that a combination of the nature and distribution of paralysis with other symptoms gives much assistance to the endeavor to accurately localize the spinal lesion. Paralysis, rapidly followed by a marked degree of atrophy and by the reaction characteristic of degeneration, points to disease of the anterior roots less frequently than to pathological change in the gray matter of the anterior cornua. In this case all reflex actions are absent. Paralysis with tension and contracture of muscles without atrophy is very probably due to an affection of the lateral columns. Paralysis without loss of reflex function and without atrophy points to an affection of the paths which ascend to the brain outside of the gray substance, or at least outside of the ganglia of the anterior cornua. Such are mostly cases of circumscript disturbances of conduction, the end of the cord below the lesion remaining intact. Paralysis with trophic disturbances gives room for suspecting an affection of the gray substance, since primary affections of the roots are very rare. Very extensive palsy with much atrophy, the reaction of degeneration, absence of reflex acts, points to a widely diffused lesion of the anterior gray substance. Paralysis in the districts of certain pairs of roots (those of the upper extremities alone, or both crural nerves, etc.,) points to a strictly localized affection of roots or lesion of the gray anterior cornua.

INSANE ASYLUM REFORM—ITS OBJECTS.—Dr. E. C. Spitzka (*Jour. Nervous and Mental Diseases*, Oct., '78) sums up an elaborate discussion of this topic thus: Mechanical restraint of any nature, as well as the employment of such narcotics as permanently damage the nervous system, should be reduced to the smallest possible minimum. Such methods of mechanical restraint as are cruel and unphysiological should be forbidden by law, and no instrument which, like the crib, is open to such objection should be permitted within the confines of any hospital for the insane. A careful physiological and therapeutical study of those neurotic medicines which, like the bromides, chloral hydrate, opium and amyl nitrite, are extensively used in asylums, should be made as a basis for a future more rational therapeusis founded not on routine principles, but on individual indications. Decentralization of the asylum buildings being the plan which is recognized as the best, both from a hygienic and financial point of view, by those engaged in constructing general hospitals and demonstrated to have been accompanied by excellent results in the case of such asylums as that at Willard, N. Y., should be adopted as the basis for all future asylum constructions. More stress must be laid on furnishing employment suitable to the habits and inclinations of patients, as an important factor in mental therapeutics, than is at present done. The medical superintendent ought to become an exclusively medical officer and delegate such duties as have no immediate relation to the welfare of his patients to civil officials. Every district that is taxed to support an asylum should have an adequate representation in the Board of Trustees of that institution. An accurate register should be kept, not only of the number of patients as a whole, but of the actual form of insanity from which they are suffering. In the statistics of causation, only that to which the disease can be clearly assigned should be taken account of. In order to be able to compare the death rates properly, the annual reports should not be limited to chronicling the deaths which take place in the asylum, but also those which take place in the case of persons discharged insane and suffering from fatal diseases contracted prior to or during the asylum sojourn. Each asylum should have its assigned district and should publish with its own tables a table exhibiting the number of insane in that district who have either been already inmates of the asylum and now discharged, or whom it has never been found necessary or possible to send there. No opportunity otherwise exists of determining the utility of the asylum or the rate of increase or decrease of insanity in a given territory. A general and equitable distribution of the means for treating the insane ought to be made; it is unjust and uncharitable to construct asylums at such a cost that only a limited number of the insane can be accommodated, while an equal or larger number are crowded out. In the registered tables of admissions to asylums it should be distinctly stated how many are cases of re-admission, and whether, on the occasion of their previous discharge they were reported as cured, improved or unimproved. Every case of seclusion or restraint should be reported, and the reasons for such restraint or seclusion given. Every accident, its details and causes, avoidable or unavoidable, and the results of all official inquiries relating to the same should be briefly published in the annual reports. Autopsies in public asylums should be made compulsory by legal enactment, and the coroner of the district should be authorized to be present at every autopsy made. Accurate register of the morbid appearances, especially of the nervous system, of the weight of the nervous centres in their aggregate and in segments, and of asymanetries in the peduncular tracts, and aberrations of the convolutions should be taken and preserved for future study.

The autopsy should, under all circumstances, be made by the asylum physicians themselves. At least one-third of the number constituting a Board of Trustees of a public lunatic asylum should be composed of physicians; the legal profession should also be adequately represented in that body. Physicians should not be appointed for a given number of years, but for life and during good behavior. It may be desirable to fix a limit as to continuance in office during old age, in which case a pension minimum for old and faithful servants of the public may be fairly asked for. In every large State at least three commissioners of lunacy will be found necessary; one of these commissioners should be a medical practitioner, the second a lawyer and the third a physician who has at some time himself been a medical officer in an asylum. No asylum medical officer should be discharged from his position except for incompetency, misdemeanor or disability in office. The statutes relating to the care and custody of the insane in most of our States require a careful and thorough revision. As soon as it will become possible to unite the supervision of our asylums in some central national board of officers, the State commissioners in lunacy should be superseded by national commissioners.

Therapeutics.

ACONITIA, ITS VALUE IN TRIGEMINAL NEURALGIA.—Dr. E. C. Seguin (*New York Medical Journal*, Dec., 1878) reports seven cases of trigeminal neuralgia treated by aconitia. From this experience he concludes: (1.) The susceptibility of individuals to Duquesnel's aconitia varies enormously, one individual in the series having been severely affected by 1–200th of a grain, while another tolerated readily 1-84th every three hours. On the average, distinct physiological and therapeutical effects were obtained by giving 1–100th of a grain three times a day. (2.) Out of six cases of severe trigeminal neuralgia, one, probably a reflex neuralgia from a decayed tooth, was not at all benefitted. Three cases, epileptiform in character, were slightly or only temporarily relieved; two cases were cured. One of these had existed for seven years, with an interruption of twenty months, procured by resection of the affected nerve. Thus, while aconitia sometimes fails, we must regard it as one of the most powerful and best agents for relieving and curing trigeminal neuralgia. (3.) We do not, as yet, know the forms of trigeminal neuralgia most influenced by aconitia.

COMPARATIVE VALUE OF SOME REMEDIES IN THE PAINS OF CANCER OF THE UTERUS.—(*J. de Therapeutique*, *Lyon Medical*, Oct. 27, 1878.) Dr. Aus. Lawrence has made a comparative study of the power of different remedies to calm the pains of uterine cancer. From his cases—about thirty in number—he concludes that ergot, given in thirty minim doses every six hours, lessens pain better than the other remedies employed. Under its use the pulsatile pains disappear, which usually are only relieved by menorrhagia. It probably acts by diminishing the afflux of blood to the uterus.

The hydrate of croton-chloral is likewise extremely useful in relieving the pains of uterine cancer, but it controls particularly those painful irradiations which are felt in the loins, the thighs and the back rather than the sufferings felt at the site of the lesion. Among local remedies the author gives his preference to carbolic acid. A concentrated solution is applied to the part by means of the speculum and a cotton tampon, and an injection containing carbolic acid is given to the patient morning and evening. Finally, small plasters may be applied to the loins and the vesicated surface dressed with an ointment containing morphine.

IODOFORM—VARIOUS METHODS OF EMPLOYING IT.—Dr. Bernatzik (*Phil. Med. Times*, Dec. 7th, '78,) gives the following notice of the current uses of iodoform. Internally, it may be given in pill or pastile form, or in emulsion with white of egg, or in drops dissolved in alcohol or ether in the dose of gr. j. ad. iii. The pill form is preferable. It is useful in syphilitic, scrofulous and gouty troubles, in tuberculosis of the lungs, in carcinoma, chronic rheumatism, cardialgia, nervous headache, neuralgia, sciatica and painful ulcerative diseases.

Externally, iodoform is used as a powder for sprinkling on carcinomatous diseases and syphilitic sores ; in the case of the latter by means of a camel's hair brush, once a day only, the sore to be then covered with charpie and waxed paper or rubber. A similar application may be made to pointed condylomata, mucous patches, phagædenic sores and ulcers of the cervix uteri; in the latter the iodoform may be strewn on rags wet with glycerine. Iodoform may also be applied with a brush or blown into the nostrils or pharynx in cases of syphilitic ulceration. Dissolved in ether, 1:15, or in a mixture of alcohol and glycerine (2 to 3 parts of iodoform suspended in 30 parts of glycerine and 10 of alcohol), it may be used as an injection and as a local application, (pledgets of lint or cotton being soaked in the mixture) to the above sores.

Dissolved in ether or alcohol (1:15–30) iodoform is recommended as a liniment in rheumatism and as an application to rhagades or fissures of the anus; also as an anodyne covering to abrasions to the skin in general. Suspended in water with the aid of albumen (albumen 1:50–100 aq.) it may be used as a gargle or enema. Dissolved in collodion it may be applied as in the other solutions above mentioned. In the form of ointment (1:2–15 lard) iodoform may be employed by rubbing on scrofulous, cancerous and other chronic glandular swellings in scaly, papular and tubercular skin diseases, in hyperæsthesia of the skin, syphilitic headache, and as an application to fissures, syphilitic and painful ulcers. Finally, in the form of plugs or rods, mixed with gum arabic, or in suppositories (iodoform, ol. amygd., aa 1, Butyr. cacao 10–20) for the nasal passages, rectum or vagina; iodoform may be employed in painful sores, particularly cancerous of these parts or of the uterus.

Physiology.

PEPTONES, THEIR NATURE AND PHYSIOLOGICAL ACTION.— Henninger (*Le Progrès Médical—Lond. Med. Record*, Nov., '78) gives us the results of some researches upon the above subject. He finds that there are as many peptones as there are albumenoid substances. When entirely purified peptones will dialyse. But the rotatory power of peptone from albumen differs from that formed from fibrine. The peptones formed from albumen and casein contain less carbon and nitrogen, but the same proportion of hydrogen as the proteids from which they were formed.

From these, and analogous facts, Henniger thinks that peptones are produced by the hydration of proteids, through the agency of ordinary hydrating agents, boiling water, weak acids and ferments. An additional argument in favor of this view is the fact that it has been found possible to recover a true proteid analagous to santonin, by heating the peptone derived from fibrin with a hydrating body such as acetic acid. These facts are compared to the analogous hydrations which transform the ureids, or bodies which can be converted into urea by oxidation, into alloxanic and oxaluric acid. This comparison is especially pertinent since M. Schatzenberger has shown by graduated decompositions that the proteids are complex ureids. Peptone will thus be the first link of the long chain which begins with albumen and terminates with urea. It has been sufficiently shown that animals fed upon peptones increase in weight and assimilate carbon. The obvious therapeutic deduction from these experiments is that in affections of the stomach peptones should be administered. Leube has proposed to treat certain diseases of the large intestines with a paste composed of pancreas, meat and fat. Three patients suffering from cancer were treated in this manner and they actually lived a long time.

PHYSIOLOGY OF THE HEART FROM THE MOMENT OF ITS FORMATION.—(*L' Union Médicale*, Nov. 14, 1878.) The conclusions of Dr. Laborde's paper, read before the Academy of Medicine of Paris, are as follows:

1. The heart of the embryo commences its movements and functions when it is as yet composed but of a simple distended tube. From the twenty-sixth hour of incubation (and perhaps sooner) we can detect the pulsation of the cardial tube.

Among organs in the state of formation the heart is the only one that performs its functions while it is at the same time developing.

At that moment the proto-plastic constitutive elements of the heart are absolutely indistinct, that is to say, that they have not as yet taken the character of muscular or nervous elements. Nevertheless, the contractile property of these formative elements is revealed by the manifestation at this moment of this physiological property.

2. The cardiac pulsation, from its beginning, commences in the venous portions of the heart, consequently in that part which will later become the auricle; it is likewise the part which will last cease to contract in the death of the heart (Bichat); The *ultimum moviens* is therefore at the same time the *primum se movens.*

3. The heart of the embryo of the future warm-blooded animal in the successive morphiological transformations and intrinsic action represents the heart of a cold-blooded animal; at first, the heart of a fish, then that of a batrachian. The pulsation, as of the heart of these animals, commences in the venous portion and passes over the ventricular and arterial portion by an invariably rhythmic succession represented by a period of three parts.

4. The observation of the functional action of the embryonic heart during this transitory period furnishes a new demonstration of this physiological fact: That the succession of movements which constitutes a cardiac revolution, commences by the venous and auricular portion to continue and finish by the arterial and ventricular portion.

Surgery.

ASPIRATION OF THE SPLEEN.—Wm. A. Hammond, M. D., (*Richmond and Louisville Med. Jour.*, August, '78), described his operation for successful aspiration of the spleen for the relief of a softening consequent upon acute inflammation. The patient was from Parkersburg, West Virginia, and was operated upon on the 16th of February, 1878. The patient reclining on the left side, a large aspirator needle was introduced through the intercostal space between the ninth and tenth ribs, at a point two inches behind a line let fall from the left axilla and on a level with the middle of the eleventh dorsal vertebra. The skin having first been drawn upward, the tissues were pierced slightly, the aspirator exhausted and a vacuum formed. The needle was then pushed into the spleen in the direction of the umbilicus. At the depth of an inch and a quarter the aspirator rapidly filled with a dark grumous fluid. The operation was continued until the instrument clogged, when it was found that eight and one-half ounces had been aspirated from the spleen. The patient was relieved of pain and was able to breath much more comfortably than before the operation. There were no bad symptoms developed and the patient fully recovered of the troublesome disease of the spleen. In making this operation care should be taken to make the opening a valvular one and to puncture in an intercostal space where the spleen is in contact with the solid abdominal walls.

OVARIOTOMY.—T. Keith, F. R. C. S., Edinburgh, (*Brit. Med. Jour.*, Oct. 19, '78) compares the results in ovariotomy operations before and after the adoption of the antiseptic spray as a safeguard from the troubles of septicænia. Through great care in his operations before the use of the spray, Mr. Keith had reduced the mortality to about 7 per cent. Under the spray the per centage of mortality has still further been reduced, until in the last forty-one cases there has been complete recovery so far as the operation itself is concerned. The doctor says that notwithstanding the assertions that the operations at the Samaritan Free Hospital have attained the highest success known yet, his operations under spray show a still greater per centage of successful cases, nor does he now feel like selecting his cases as he formerly did.

CHLOROFORM NARCOSIS (*Louisv. Med. News*, Nov. 30, '78).—Wachsmuth, of Berlin, asserts that much of the danger from the administration of chloroform may be averted by adding to it twenty per cent. of oil of turpentine, which, he says, stimulates the lungs and thus protects them against the great enemy of chloroform narcosis—pulmonary paralysis.

First Insensibility from Ether.—Dr. Packard (*Phil. Med. Times*, Dec. 21, '78) recommends for operations not lasting over forty seconds the following procedure: Let the patient lie upon the sofa and take a sponge wet with ether in his own hand, directing him to hold the other arm up in the air. After breathing the ether for a few moments the arm will drop and you will have from thirty to forty seconds of unconsciousness in which to operate. The sponge is removed and the patient is ready to go about his business. This procedure gives rise to no headache, nausea or other unpleasant symptoms and is particularly useful in children. The chief source of disappointment is in not recognizing the right moment, for if this be allowed to pass unconsciousness will not again occur until full etherization. When the arm wavers be ready, and as soon as it drops perform the operation and there will no pain be felt.

Talipes Varus—Its Treatment.—Dr. J. C. Hutchinson (*Med. Record.* Dec. 21, '78,) recommends the following plan of treating this deformity: (1.) A large number of cases of varus can be cured by mechanical means alone if the foot can be brought by manipulation completely or nearly into its normal relations with the leg. Plaster of Paris splints, either without or with tenotomy, should be used until the deformity is reduced, and then a club-foot shoe should be substituted for it, employed in the manner which I have advised. (2.) In a large majority of cases tenotomy is limited to the tendo Achillis. It is only in exceptional cases of varus that section of any other tendon is required. (3.) The physiological treatment should be practiced from the beginning and continued until the distortion has been overcome, the motions of the joints restored, and the functions of the muscles re-established. Remember that you have not cured the patient by reducing the deformity; the limb will be of little use unless the functions as well as its form are restored.

Early Hip Disease—Its Diagnosis.—Dr. Ollivier (*Boston Med. Jour.*) says that mistakes in the diagnosis of hip disease are not uncommon, but their results are deplorable. A diagnosis of the disease should be made as it passes through the stage called rheumatism. Cases are not infrequent in which the disease is unrecognized until suppuration of the joint is imminent. Indeed, some hold that the hip disease does not exist until grating can be felt on manipulating the joint under an anæsthetic. To avoid this error we must remember: (1.) Serious hip disease may exist when no pain is complained of and when no tenderness can be discovered. (2.) Hip disease may be present although the motion at the hip joint is quite free. (3.) If the motion at one hip joint is more limited than at the other, hip disease must always be suspected, and the symptom regarded as highly characteristic of hip disease. (4.) At the earliest stage the limitation of motion most readily recognized is in the direction of extension.

FRACTURES OF THE BASE OF THE RADIUS.—Dr. J. S. Wright (*Med. and Surg. Reporter*, Nov., 1878) gives us the results of very extensive experiments and observations respecting fractures of the head of the radius. He concludes: (1.) A fracture of the base of the radius may be distant from the lower articular surface about one and one-half inches, as observed by Colles; or from one-fourth of an inch to an inch, as observed by Robert Smith; or from three to twelve lines, as observed by Dupuytren; or from one-fourth of an inch to one and one-half inches, as observed by Hamilton; or a piece of the posterior may be split off as observed by Barton; or the base of the radius may be fissured in the long axis, as observed by Bigelow. The perfect accuracy of these statements may be somewhat questioned, on the supposition that they have been made without accurate and exact measurements. (2.) A fracture of the base of the radius may be transverse. (3.) A fracture of the base of the radius may be oblique. (4.) When the base of the radius is broken, the average length of the lower fragment is somewhat more than one-half an inch. (5.) A fracture of the base of the radius may be vertical. (6.) A fracture of the base of the radius may be impacted. (7.) A fracture of the base of the radius may be comminuted. (8.) A fracture of the base of the radius is generally caused by the reaction of the resisting surface on which the palm of the hand strikes at the time of the fall; the carpus being driven or pressed against the base of the radius. (9.) A fracture of the base of the radius may be caused by extension or flexion of the hand on the forearm. (10.) Muscular contraction must be recognized as an associate cause of importance in fracturing the base of the radius. (11.) An important element in the causation of fractures of the base of the radius is found in the structure of the bone, the seat and direction of the fracture being usually where there is the least compact tissue.

Clinical observation and post mortem examinations show that there are, and must be, some cases of fracture of the base of the radius which will inevitably result in permanent deformity and disability. If experts testify that the fracture of the base of the radius never entails permanent deformity or disability, they will unjustly ruin the surgeon who is defending himself in a just cause.

PARAFFIN SPLINTS.—Dr. Wm. MacEwen (*London Lancet*, Nov., 1878) reports his experience in the use of paraffin splints:

If a semi-elastic bandage is required, paraffin, with a low melting point, 110° Fahr., is employed; but, if a firm, unmovable one is needed, the melting point of the paraffin should be 130° F. It is best melted by placing the blocks in a vessel, and the vessel in boiling water. Gauze bandages, previously rolled and ready for application, should then be dropped into the melted paraffin, and in five minutes they become saturated. They are then lifted out, the superabundant paraffin gently pressed from them. When sufficiently cool, the surgeon applies them to the limb. To prevent the bandage from adhering to the limb, a dry gauze bandage is first applied to the limb.

If a very firm splint is required, a coating of hot paraffin may be brushed over the bandage after two or three layers have been applied. The splint may be cut in any way needed for compound fractures. The advantages of this splint are: (1.) It is always ready for use; it may be kept for any length of time without spoiling or undergoing change, unless it be exposed to heat. (2.) It is easy of application, requiring no special skill or training, and it may be ready for the surgeon about fifteen minutes after he has ordered it. (3.) It sets readily, and yet not too soon. Starch and glue take a much longer time to harden; glass still longer, while plaster of Paris sets too quickly for many purposes. (4.) Before it sets it may be cut with a pair of scissors, and afterwards with a sharp knife. (5.) It may be cut into a splint quite impervious to discharge or moisture of any kind. (6.) It is light, easy and comfortable to the patient. (7.) It may be formed into a semi-elastic bandage, or a firm, solid splint. (8.) It may be used many times. After one splint is finished, the paraffin can be re-melted and reapplied.

Obstetrics.

ON THE MANAGEMENT OF PREGNANT WOMEN.—By Montrose A. Pallen, A. M., M. D. (*Richmond and Louisville Medical Journal*, August, 1878.)

The first duty of an accoucheur is to discover if his patient be actually pregnant. Much of very great importance devolves upon the obstetrician, not only as concerns the safe conduct of the mother through parturition and the preservation of the child, but also that his own reputation may not suffer. Pregnancy having been established, the woman's history, her surroundings, station in life, age, primi- or multiparity, general condition, and period of gestation must be inquired into, after which a physical examination should be made to determine the diameters of the pelvic straits, the symmetry and size of the excavation, the normality, position and integrity of the vagina and uterus, the elasticity of the abdominal muscles, the presence or absence of umbilical, inguinal or femoral hernia, the shape and size of the breasts and nipples, and the presence of enlarged or varicose veins of the lower extremities or of the pudenda. The urine must be chemically, physically and microscopically examined, and the state of the bowels carefully ascertained. Psychological phenomena call for study and differentiation. Normal impregnation should be positively determined as contradistinguished from tubal or abdominal pregnancy. The state of the fœtus, its strength and viability, as well as the implantation of the placenta, must not be overlooked. Prevention of puerperal fever, at least avoidance of infectious influences must be strictly sought.

By following up this line of examination as herein suggested the attending physician will be able to do his patients ample justice.

Prof. Fallon does not advise the induction of premature labor in cases of deformed pelvis, but would recommend Thomas' operation of laparo-elytrotomy, believing that this operation offers far greater chances to both mother and child than embryulcia.

But, on the other hand, Prof. Pallen does advise abortion in cases where perimetric induration from some of the forms of inflammation would prevent the uterus from rising out of the pelvis or would prevent post partem contractions. The procuring of abortion is also a warrantable procedure in those cases where a large fibroid or fibrous cyst complicates the pregnancy and renders the uterus liable to inefficient contractions and possibly a supervening hæmorrhage that would speedily prove fatal.

A tumor involving both ovary and uterus would warrant an abortion before the fourth month, not after. Cancer of the uterine body would call loudly for abortion before the fourth month, because at that early period the hæmorrhage could most certainly be checked by tampon or the use of Barnes' or Molesworth's dilators, combined with the use of very hot water or tincture of iodine or the sesquichloride of iron.

Retroversion of the uterus calls for a rectification of the malposition. Abortion is apt to follow retroversion, if complete, and should be avoided by reposition of the uterus, the woman being in the knee-chest position, vaginal ballooning and possibly the wearing of a Hodge pessary. This last applies equally to unimpregnated and pregnant women. Of course a pessary should be removed after the fourth month in pregnant conditions.

Parenchymatous nephritis is a complication of pregnancy of a nature to demand the most skillful treatment. The urine of a pregnant female should be frequently examined, and, as soon as albumen is discovered, means must be used to reduce the high arterial tension of pregnancy. The means used to accomplish this are such as will drive the blood to the surface, as hot water and alcohol frictions, massage, milk diet and kumyss, uniform temperature in bed, &c. If eclampsia threaten, chloroform by inhalation; and, if the patient be at all plethoric, or not, if the chloroform prove inefficient, blood-letting may be resorted to.

In puerperal fever, prevention is better than cure, and all antiseptic precautions should be taken to prevent infection; and if, after all this has been done, a patient has the fever, the physician should dismiss his other puerperal cases, or turn his obstetric practice over to another man who has been less unfortunate, or, at least, has not had any case of puerperal fever. Proper antiseptics, properly used, will stamp out puerperal fever if also rigid quarantine be enforced.

(This is a brief synopsis of Prof. Pallen's paper, and to those who have access to the paper itself it will seem very imperfect. We would commend a careful perusal of the original paper to all those who may have access to it as published in the *Richmond and Louisville Medical Journal*, believing that all medical men who are interested in the subject will be amply repaid for the trouble.—Ed.)

Digital Dilatation of the Os in Labor.—Wm. Stephenson, M. D., F. R. C. S. E., (*The Obstetric Journal*, August, 1878), has embodied in a paper under the above caption some very valuable hints regarding artificial dilatation of the os uteri in labor. He says that there are very few practitioners who do not employ some sort of digital dilatation in the first stage of labor, if it is nothing more than the manipulation necessary to complete a diagnosis. The methods of applying or practicing artificial dilatation vary, but most practitioners have some plan of their own, and they not unfrequently find that a gentle dilating force greatly increases the efficiency of nature's efforts and shortens the first stage of labor. Judging by the text books, digital aid to dilatation has not obtained a place in the obstetric art, while blood-letting, baths, belladonna, nauseants and the like, remedies which are seldom or never used, are retained. True, Dr. Playfair refers to this practice in his late work; in the former part of his work to condemn and in the latter part of the same to praise, but other obstetric works are silent on the subject.

Digital aid is not to be employed while the cervical canal is not yet obliterated or the lower uterine segment is not sufficiently expanded to allow the presenting part to come in contact with the cervical tissue. But when the lower segment of the uterus has expanded and the cervical tissue has become thinned, the os remaining small, then judicious manual interference may be of great service. Now, as to the method of procedure. The position of the fœtal head must be fully ascertained, and having that knowledge at our fingers' ends we may proceed understandingly to assist the patient. In the first position, then, the assistance should be directed to pushing the os uteri gently over the fœtal occiput in the direction of the left thyroid foramen; and in the second position, the pushing should always be gently toward the right thyroid foramen. This manœuvre, if successful, will greatly assist chin flexion and rotation. In the posterior positions the treatment is less readily carried out, but can still be accomplished by giving the force a direction toward the corresponding ilio-sacral synchondrosis. If properly done this method need not be confined to protracted cases but will be found useful in nearly all cases.

[Now and then we may find a patient that has so much hyperæsthesia of the vagina and os uteri that manipulation cannot be practiced without causing too much suffering, even the presence of the finger in the vagina producing seemingly intense pain. These are the exceptions.—Ed.]

Treatment of Severe Vomiting in Pregnancy.—Edward Copeman, M. D., F. R. C. P., (*British Medical Journal*, Sept. 28th, 1878,) has added five more to his already published cases of the successful treatment of vomiting in pregnancy by dilatation of the os uteri. The doctor says that up to the present time no failure has come to his knowledge when this treatment has been carried out fully. The os must be dilated so as to admit the finger easily.

Diseases of Women.

HÆMORRHAGIC DIATHESIS—ITS RELATION TO GYNÆCOLOGY.—Dr. E. Börner (*London Medical Record*, Nov., '78,) gives us the results of many careful observations on the above topic. (1.) It may be assumed with great probability that hæmophilia (hæmorrhagic diathesis) occurs in the female sex more frequently than has hitherto been believed, and far more frequently than in the male sex. (2.) The cause of error which has hitherto probably prevailed with regard to the numerical frequency of hæmophilia in the female sex appears to be that in girls the diathesis often remains to a certain extent latent and is frequently first brought into action by fixed causes, apparently connected with the period of reproductive activity. How often may not, indeed, hæmorrhage in a hæmophilic puerperal woman have been quoted as the result of defective involution of the uterus, or fatal flooding, simply as the result of atony of the womb. (3.) Of the different modes in which hæmophilia is manifested in the female sex several are of special interest to the gynæcologist. (4.) The catamenia of hæmophilic individuals are not normal as to quantity. Sometimes there is menorrhagia, sometimes vicarious menstruation. (5.) The most momentous time for hæmophilic females appears to be the reproductive period. (6.) Coitus may be attended with much more serious results in the hæmophilic than in the healthy individual. Thus there may not only be more or less hæmorrhage following each act but there may even be fatal hæmorrhage. (7.) During pregnancy profuse metrorrhagia may arise from the state under consideration. (8.) There is no special disposition to premature interruption of pregnancy in hæmophilic women. (9.) Abortion is accompanied with severe hæmorrhage in hæmophilic women. (10.) In the period following delivery, hæmorrhages frequently occur which may bring the patients into extreme danger or even death. It may be excessive in amount or continue for an excessively long time. (11.) During lactation there may be severe bleeding from the nipples or from the genitals. (12.) The climacteric period may set in with violent hæmorrhage. (13.) In hæmophilic women, hæmorrhage from the uterus may be caused by simple digital examination, by the introduction of a speculum, by the introduction of the uterine sound, and by anxiety, fright or vexation. (14.) In these persons the genital mucous membrane presents an excessive fineness of structure with tendency to serious infiltration.

URETERS—THEIR MALPOSITIONS.—Dr. W. H. Baker (*N. Y. Med. Jour.*, Dec., 1878,) collects a considerable number of cases of malpositions of the ureters. From these cases and his own observations the following facts are noted: (1.) The ureter may be naturally so misplaced as to give rise to the most troublesome symptoms, foremost of which stands incontinence of the urine. (2.) In cases where the ureter is so misplaced it is possible to overcome the difficulty by surgical interference. (3.) It is not absolutely essential to the life of an individual that either kidneys, ureters or bladder exist, as shown by the case reported by Rayner. (4.) Contrary to the opinion of most writers, and substantiated by the forty-eight cases reported by Brumer, where one kidney is absent the remaining one is not always enlarged, as shown by a case reported by Dr. Cutler. (5.) Where the ureters arise double they are usually given off one from the upper and the other from the lower part of the kidney, the pelvis being distinct and separated by the proper structure of the kidney. (6.) Where a ureter terminates in some other part than the bladder, that viscus may be present and well developed, notwithstanding most authorities state the contrary. (7.) In most of the foregoing cases the malformation of the ureters were not accompanied by any troublesome symptoms, and the interesting defects were only discovered at the autopsy. (8.) In three of the recorded cases the malformation was discovered during life, having given rise to incontinence of urine by the ureter discharging either by the side of the meatus or into the vagina.

Pathology.

MIGRATION OF LEUCOCYTES IN PASSIVE HYPERÆMIA.—Wm. T. Belfield, M.D., (*Chicago Med. Jour. and Examiner*, Sept., '78), seems to have settled the question as to the migration of leucocytes in passive hyperæmia by his experiments with frogs.

He says: On June 19, I curarized a frog, cut down on the femoral vein and made compression by means of a rubber band and piece of cork. I then stretched the web of the corresponding foot on the stage of a microscope. He used a Hartnack No. 4 objective and Gundlach C periscopic eye-piece. The pressure was so regulated as to retard the onward movement, but complete stagnation was avoided. The field was carefully watched for nine hours, but no leucocytes were actually observed to leave the vessels, although several were observed just external to the walls, having escaped unnoticed. From the 19th to the 36th hour numerous leucocytes were observed to leave the vessel, the shortest time of exit being twenty minutes, but frequently the time was one or two hours. The method of locomotion of the leucocytes did not differ from that in inflammation, but the excessive change of form and the protrusion of long processes was not observed. There was frequently a flattening of the leucocytes against the wall, then the appearance of a bud external to the wall, then the gradual enlargement of this bud and shrinkage of the intra-vascular portion, the part piercing the wall being apparently a tunnel through which the rest of the body passed. Often the locomotion was continued after the leucocyte had become wholly extra-vascular, so that it traveled several times its own diameter from the place of exit. It was noticed, too, that other white corpuscles were disposed to pass out at the particular point of the previous emigration, so that several would be crowded together along the vascular wall, and an hour later would be in close proximity external to the vessel opposite the same point. This phenomenon occurred usually in the large capillaries and small veins ranging from the $\frac{1}{1500}$ to $\frac{1}{600}$ inch in diameter. Nor were the passages always made where the current was the slowest, nor where the vessel gave evidence of the greatest engorgement, as emigration from a relatively rapid current but sparsely supplied with corpuscles was not infrequent.

The doctor continues: Before I had watched the process a great while I became aware that the colorless corpuscles were not the only bodies exhibiting amœboid movements. Certain red corpuscles without nuclei of circular shape and small size ($\frac{1}{2500}$ inch in diameter) performed the same movements with as great celerity as did the white. So extensive was the locomotion of these red corpuscles that at the 36th hour of the experiment there were numerous red patches in the field that looked almost like hemorrhages. The doctor repeated the experiment twice afterwards and the same phenomena occurred each time. In one experiment, migration began within three hours after compression was made.

Chemistry and Pharmacy.

PREPARED BY A. B. LYONS, A. M., M. D.

SOURCE OF CURARE (WOORARA).—Dr. Jobert, writing from Belin de Para, makes the following statements in regard to the preparation of this poison by the Indians: The principal ingredients are *urariuva* (probably strychnos castlenœ, Wed.) and *eko,* also called *pani du maharao* (probably cocculus toxiferus, Wed.) The young bark of these plants is well scraped, and the scrapings mixed in the proportion of four parts of the former and one of the latter. The mixture is well kneaded with the hands, and in a funnel made of a palm-leaf exhausted with cold water, the liquid being returned seven or eight times. The red infusion is boiled with fragments of *taja* (an aroidea), and *mucura-ea-ha,* or *eone* (probably Dedelphy's coucrioosa). After about six hours the liquid has acquired a thick consistence, and is mixed with the scrapings of three species of pepper (Artanthe ?) and *tan-ma-gere,* and again boiled, and allowed to cool, when it will have the consistence of a thick paste.—*Jour. de Pharm. et de Chim.*—*Am. Jour. Pharmacy.*

USE OF CADAVER POISON BY THE AUSTRALIANS.—It is said that the natives of Australia and New Zealand are familiar with the deadly properties of putrid animal matter, and that many of their poisoned arrows and spears are simply smeared with the liquids from a putrefying corpse. According to Taflin, the Narringeris, who inhabit the lower Murray District of Australia, frequently procure the death of an enemy by this poison. The instrument employed is called *nieljeri.* It is a sort of a spear, whose tip consists of a sharp-pointed piece of human bone, six to eight inches in length. This is poisoned by plunging it into the flesh of a partially decomposed human body, and tying about it a bunch of hair or feathers saturated with the fat of the decomposing body. It is easy to understand how the slightest prick from such an envenomed point might prove sometimes, if not uniformly, surely and speedily fatal.

CHEAP AND CONVENIENT DIALYZER.—Huizinga recommends to make rectangular bags of moist parchment paper, fastened together with a paste consisting of a warm 15 per cent. gelatin solution, containing 3 to 5 per cent. of chromate of potassium. The dialyzers are dried and exposed to the sunlight, fastened over hard rubber frames, and tested by filling them with water. Several such bags may be suspended in one vessel, care being taken to remove the water from the bottom of the vessel by a siphon, supplying fresh water, in the meantime, from above.—*Pharm. Post.—Am. Jour. of Pharm.*

SAPO VIRIDIS.—Green soap, which is officinal in Germany, and occasionally prescribed among us, is a common household article in France and Germany, as common soft-soap, made from animal fats, is in America. The genuine article is made from hemp-seed oil, but, as there is no special virtue claimed for the hemp-seed, an imitation made from linseed oil may be substituted by the pharmacist, rather than to pay an exorbitant price for a probably spurious "imported" article. E. B. Shuttleworth (*Canada Pharm. Jour.*) gives the following method of preparing such a soap on the small scale: Into a clean pot or dish, preferably of iron or copper, and capable of containing at least three times the quantity, put one part (say four ounces) by weight of linseed oil, and add in two portions, three parts in all by measure (twelve fluid ounces) of liquor potassæ, U. S. P. Boil quietly, with frequent stirring, until the mass becomes clear, (for the quantities named about one hour), adding water cautiously during the process, if the mass becomes too thick to stir easily. When cool, but before the soap "sets," work in the coloring matter, prepared by boiling finely-powdered indigo (twenty grains) with water (1½ ounces) until formed into a uniform thin paste. The soap must not be too hot when the color is added, or the desired green tint will not be obtained.

FLUID EXTRACT OF ERGOT FOR HYPODERMIC USE.—Yvon's method, as detailed in *L'Union Pharm.*, is as follows: Coarsely-powdered ergot is deprived of fixed oil by treatment with carbon di-sulphide, and then dried in a dark place until the odor of the di-sulphide is no longer observable. The powder is then percolated with a cold solution of four parts of tartaric acid in 1,000 of water. The percolate is heated to coagulate albuminoids, carefully evaporated to one-third, cooled and filtered. The filtrate is digested with a slight excess of freshly-precipitated calcium carbonate to remove excess of tartaric acid, and the clear filtrate concentrated to a syrupy consistence, mixed with strong alcohol; again filtered, treated with animal charcoal, filtered and evaporated. The residue is taken up by distilled water, 0.15 grams of salicylic acid added for every 100 grams of ergot, and then enough water or cherry laurel water to make the weight of the solution equal to that of the ergot. After several days repose, the clear amber-colored fluid is put up in small vials.—*Am. Jour. Pharm.*

Correspondence.

Is the Hypodermic Injection of Piles Dangerous?

About two and one half years ago I discovered and published to the profession the secret method of the itinerant "pile doctors."

The plan of these itinerants, which was sold as a secret and at a high price from one quack to another, is substantially as follows: A hypodermic syringe with a very fine, sharp point is charged with a strong solution of carbolic acid. Generally three parts of crystallized acid to one of any bland oil are employed, but they sometimes combine them in equal parts, and for the oil occasionally substitute glycerine. The method of the operation is to insinuate the point of the syringe into one of the piles and throw in a few drops only of the solution. This causes the hæmorrhoid to turn white and gradually to wither away. Another one is then attacked, and thus by degrees a complete cure is effected without causing enough irritation at any one time to take the patient away from business. The operation is sometimes painless, but in other cases decidedly otherwise.

Attention was called to the seeming danger that by this method the carbolized oil might be thrown directly into the hæmorrhoidal veins. The injection of coagulants into venous enlargements of other parts of the body has, in a few cases, caused sudden death by embolism, a portion of the clots being carried to the heart and thence passing into and blocking the pulmonary artery.

It was suggested therefore that the injection of hæmorrhoidal veins might involve the same risk. The three groups of hæmorrhoidal veins inter-communicate, but the main outlet of the lower and middle groups is to the internal iliac and thence to the heart, while that of the upper is to the portal vein. It is conceivable that dislodged clots or globules of the injection might be swept by the current of the blood to the heart, or, possibly, might pass through the upper plexus into the portal vein and be lodged in the liver.

I learn that a number of the itinerants have taken warning from my suggestion of danger and employ a sort of clamp forceps to compress the base of the pile for a few minutes at the time of the operation, thus hoping to prevent the passage of clots or globules along the veins. This method has now been in use over three years and has been applied to thousands of persons. If there be any actual danger in it, such as is suggested by anatomy and by the danger of similar injections in other regions, the results should be manifested before now. Experience only can settle such matters. If, on the other hand, the method is safe, it ought at once to be adopted by the regular profession as the best method of dealing with this distressing disease.

To settle this question of danger, I take the liberty, through the columns of this journal, of asking every physician in the United States, who has had opportunity to know the results of this treatment, to write me immediately, giving information on the following points:

1. How extensively has the plan been tried in your region?
2. How far is the plan painless or otherwise?
3. Have any sudden deaths or other alarming symptoms been known to follow its application, and if so, how soon, and what were the symptoms?
4. Have any cases been followed by dangerous disease of the liver?

I propose to collate all the information thus gathered and communicate the results in a future article through the pages of this journal.

Please address

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Reports of Societies.

Detroit Academy of Medicine.

PREVAILING DISEASES.

November 26th, 1878.

Dr. Connor—According to the newspapers, law suits would seem to be the prevailing disease just at present, and from reading the published accounts of one of these the following question has arisen in my mind. Is it possible that there should be found in an unmarried woman a large uterus, with a patulous os smooth in every part but one, where to the size of a trade dollar it was roughened—a Graffian follicle, enlarged to the length of one inch at its long diameter, and yet that she should not be pregnant? The evidence adduced in a certain case would seem to prove, from the off-hand examination made, that such a state of things has occurred. Perhaps the gentlemen present at the autopsy might not have been able to stand a quiz upon the subject, but as they agreed in the story told, they certainly must have correctly seen what was laid before them. Under these circumstances, then, could we say that the woman was not pregnant? I know that a Graffian follicle may be enlarged by inflammation, that the uterus may be large and the os even patulous, and yet no pregnancy have existed, but I cannot imagine the existence of a smooth membrane covered with pavement epithelium lining the uterus without the idea of pregnancy being associated with it. If such a condition can exist without conception having taken place, what is the condition of the woman?

Dr. Noyes—In my opinion it would be a case of pregnancy and not of dysmenorrhœa, as some wished to make out of a similar case.

Dr. Shurley—Could not an enlarged uterus, with a patulous os and a smooth lining membrane, be ascribed to the presence of a uterine polyp?

Dr. Noyes—I should think not. Of course, we might find a large uterus with a patulus os, but I doubt whether the smooth membrane would be there. Moreover, there was no testimony in this case as to the presence of a polyp.

Dr. Shurly—I do not place much dependence upon the existence or not of a corpus luteum in the post mortem diagnosis of pregnancy, for I do not believe there is any one thing upon which we can absolutely depend in this question and say, this means pregnancy. We must rather trust to the whole clinical history, for corpora lutea have been found in cases in which pregnancy was impossible. Some five years ago I made a post mortem examination of a case of tubal pregnancy in which the ovum had ruptured into the peritoneum. Here the uterus was enlarged, the os patulous and the uterine lining membrane smooth. The condition of the ovaries I have forgotten.

Dr. Cleland: Sir James Simpson speaks of such a condition of the uterus following as the result of a slow labor, as e. g., the expulsion of a polyp. What is the condition of the lining membrane after an abortion?

Dr. Connor: Until after the twelfth week the membrane is smooth.

Dr. Robertson: Could any form of dysmenorrhœa cause the uterus to enlarge to double its normal size?

Dr. Bradley: According to my reading, I do not believe that any dysmenorrhœa could give rise to such hypertrophy unless there were obstruction to the flow.

Dr. Johnson spoke of an interesting case of double facial paralysis occurring in a strong young man, in whom no specific [illegible] could be detected. He thought the trouble [illegible] The right side was paralyzed first, [illegible] months ago. This partial recovery had taken place [illegible] the left side was paralyzed. The orbicu- [illegible] that the tears flow over the [illegible]

[illegible] case of measles this season [illegible] have had some scarlatinal cases on [illegible] diphtheria. I have lately [illegible] occurring in a patient in the [illegible] and no trace of contagion. [illegible] prompts me to men- [illegible] have reported diphthe- [illegible] This tends to [illegible] the epithelium of the [illegible] stages of tuber- [illegible] would seem to indi- [illegible] and diphtheria. [illegible] These different dis- [illegible] due to the irrita- [illegible] different stages of [illegible] appeared in a place where they had been previously unknown, the others would probably come into existence?

Dr. Shurly—Yes, I think they would, but, at the same time, we could say nothing of the length of time required to bring this about, as we know nothing of the life history of this germ.

Dr. Lyons—Some years ago measles appeared for the first time in the Fejee Islands, and its course was a very fatal one. After the latter came the first epidemic of whooping-cough.

Dr. Shurly—Up to the year 1868, none of these diseases had appeared in the small hamlet of Benzonia. At that time, diphtheria commenced to manifest itself, and the following year 1869, scarlet fever became known among the inhabitants.

VERBAL COMMUNICATIONS.

Dr. Noyes—I saw for the second time to-day a lady who four months ago, whilst on her way to the seaside, consulted me on account of the failing sight in one of her eyes. The loss of vision was very slight. An ophthalmic examination of the interior of the eye showed the existence of a very faint haziness in the cortical portion of the lens, but it was so faint that it was really difficult to see it. The other eye was perfectly free from any lesion. I informed the lady that she had a commencing cataract, and questioning her as to its cause, I inquired if she had received any injury to the eye or the head. She had no recollection of anything of the kind having occurred. However, I still believed that the lesion was owing to some traumatic cause, and requested her to call upon a Boston physician. He asked the very same questions, to which she again replied in the negative. But now, on her return, her husband says that a short time before she commenced to complain she struck her head one night against her chamber door. To-day, the cataract is completely opaque, and now comes up the question of operative procedures. Should anything be done, considering the facts that the cataract is of traumatic origin and that the other eye is in good condition? Some would say yes, and I say no; for though ninety-eight per cent. of operated cases are successful two are not, so that there is some danger on the side of the operation, whilst, if success attend it, the injured eye will not accommodate with the sound one, so that the latter would still be obliged to do all the work. To-day, however, the lady complained of dizziness, neuralgic pains in the left side, soreness under the ear, some cough, irritated throat and noises in the ear, made worse by lying on that side. On examining the ear I found a very hard plug of cerumen, which I pulled out with the forceps, as injections were of no avail against it. The ear was chronically inflamed and the tympanum bowed inwards. The practical point which I wish to bring forward in relating the case is, that when a patient comes complaining of pain around the ear, dizziness or irritation of the throat, we should not omit examining the meatus auditorius externus.

Dr. Robertson—Would the plug spoken of cause the throat trouble, or the irritation of the latter organ give rise to the formation of the plug?

Dr. Noyes—Of course a mass of wax may be produced by a purely local trouble of the meatus, but an inflammation of the middle ear usually comes from the throat.

Dr. Johnson—I have a few cases in mind where the sequence of events was about as follows: Considerable catarrh of the throat, involvment of portion of Eustachian tube, and great tickling and itching about the meatus. The patient then scratches his ear with anything handy and finally the disease is established.

Dr. Noyes—Yes, and the more you relieve the itching by scratching the worse the irritation becomes. However, I feel certain of my point, as I have cured many by purely local treatment.

Dr. Robertson—I removed last week from a lady's ear a plug not consisting of wax but of a bug, which had remained there since April. I took it piecemeal by the forceps.

Dr. Connor—The meatus is composed of a double-inclined plane, from whose external position the cerumen takes its origin, and from the location of the latter the secretion was intended to flow out; but if by any chance it runs over the boundary line, it will flow down upon the membrana tympani. The lining cells will pass out, but the wax stick and even the skin cannot shove it out again. Then the dust, foreign particles, etc., accumulate upon it until the meatus is filled. I believe that the probable origin of many of these plugs may be explained in this way. The patient, in useless endeavors to cleanse the meatus of the ears, pushes the cerumen beyond the boundary separating the inclined planes, and then only increases the evil in subsequent attempts to clean out the passage by such instruments as the ear-spoon. Dr. Burnet, I believe, was the first to call attention to this point.

Dr. Noyes—The point in anatomy is well taken and is correct, but it will not account for all the cases. The lady previously mentioned is particularly careful about not introducing any object into her ears, and yet these plugs continue to form.

Dr. Shurly—There are certainly cases where there is a vitiated secretion with exfoliation of scales, but this is a special disease, in no wise dependent upon throat trouble. The one proceeding from the throat is of a different nature and is particularly found in children with enlarged tonsils.

On motion, the meeting adjourned.

The Detroit Lancet.

LEARTUS CONNOR, A.M., M.D., EDITOR.

Public Medical Libraries.

Within three years the Boston Medical Library Association has collected a library of about ten thousand volumes. Meantime it has maintained a reading-room well stocked with current medical periodicals. This result has been reached merely by the fees of membership and occasional voluntary subscriptions. Recently a larger house has been purchased, and reading-rooms, hall, etc., fitted up so as to better accommodate the profession. The intention is to make this the headquarters of physicians in Boston and all who may visit it. The record thus presented is without an equal in the history of medical libraries, and proves incontestably that there was a felt need for such a movement in Boston. The medical library in Chicago has made excellent progress during the past year. Its journal has increased vastly in efficiency and influence. Altogether, the profession in these two cities may be congratulated upon their success in these organized efforts to render accessible to the profession a large collection of medical literature. It cannot fail to elevate the scholarship and practical worth of the profession in these cities. We hope that ere long the profession of Detroit may combine in some such scheme with equal success.

But the greatest medical library is the National Medical Library at Washington, D.C. Under the direction of Dr. J. S. Billings, of the United States Army, this library has been almost created within the past fifteen years. In an article published in the *Library Journal*, May, 1878, Dr. Billings has described this library. It contains forty-six thousand bound volumes and fifty thousand pamphlets. On the shelves are nearly nine thousand volumes of medical periodicals, over seventy-five per cent. of all that have ever been published. Every important medical journal in the world is now taken. As soon as these copies are received their contents are noted, and each original paper is so indexed upon subject cards as to be made available within three days after their receipt to any who may desire the information. An idea of the completeness of this system may be gained from the fact that these subject cards include about four hundred thousand titles. How shall this latter be made available to the profession? Surgeon-General Barnes is endeavoring to induce Congress to pass an appropriation sufficient to publish this great work. All scholars will at once grasp the grand scope of the idea to place at every physician's disposal a list of all the articles published on any given medical subject. This subject catalogue alone will fill seven royal octavo volumes of one thousand pages each. The author catalogue will make three volumes more. The cost of the whole for an edition of three thousand would be about $121,000. The cost is large, but the end is of far more value to the nation than the money. This index catalogue is now ready for the printer. To publish and distribute this would immortalize Congress, would greatly aid medical education and the treatment and prevention of disease. We join our earnest entreaty to that of every medical scholar and humanitarian in the land that the personal influence of physicians be brought to bear upon Congressmen all over the country, so that they may act wisely in this matter and authorize the publication of this catalogue *at once*, ere accident destroy the labor of years. It is a national work for the nation's honor and intimately blended with the nation's best development.*

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*For our facts we are indebted largely to the *Boston Medical Journal* and the annual report of the U. S. Surgeon General for 1878.

American Public Health Association.

This society held its annual meeting at Richmond, Va., Nov. 19 to 22, 1878. The special subject for consideration was yellow fever, as presented by the famous yellow fever commission. This body, by their study, decided that the germs of this disease were brought from the West Indies to New Orleans, either by steamship in May or by fruit vessels in June. It did not find a single instance to justify the idea that the fever originated *de novo* at any spot in the United States. The transmission of yellow fever for any considerable distances appeared to be due to human intercourse. In some cases the poison was carried in clothes, in others in cotton bagging or other similar goods. Disinfectants were found useless, or even worse. Personal prophylaxis, by means of drugs or other therapeutic means, had proved a constant failure. Quarantine, maintained with such a degree of rigor that absolute non-intercourse is the result, has effectually and without exception protected its subjects from yellow fever. After many papers and much discussion bearing upon the topic, the report was referred to a special committee, of which Dr. J. S. Billings was chairman. This committee, while in the main endorsing the report, urged that its labors be extended and that it should try and discover the actual *materies morbi.*

This should be pursued in the line of experiment, The excretions or fluids from the disease should be inoculated in animals. This must be done directly and after such substances had been acted on by heat and various substances. It was urged that the general government should appoint a commission of experts to thus thoroughly and fully search out the causes of yellow fever and the best methods of preventing its introduction into this country. For this end a sufficient appropriation should be made to secure the best men and the best means for carrying out such investigations. Emphasis was laid upon the value of internal sanitary arrangements as preventing or modifying the disease. Considered as a whole, we cannot see that any new facts have been brought to light by either the yellow fever commission or this Health Association; yet its work has awakened interest in the matter, which we trust may be continued until the subject is sifted to the bottom. In the interest of public health, the Association appointed a committee to endeavor to secure from Congress the publication of the index catalogue of the medical library of the Surgeon General's office.*

From the papers we learn a bill has passed Congress authorizing an investigation into the causes of yellow fever and the proper methods of preventing epidemics. For this end fifty thousand dollars have been appropriated. Of the result reached by this commission we shall keep our readers fully informed.

For ourselves, we think that too much emphasis has been laid upon quarantine. In our judgment, local sanitary conditions may be made such that the germs of yellow fever and cholera could not propagate themselves. Such is the lesson we have learned from the facts, as we could ascertain them, presented by the late epidemic. Let towns be perfectly drained and sewered, and let each house in them be kept perfectly clean, and there would be no soil in which these diseases could produce their dire effects. Personal and corporate filth in warm climates is the home of yellow fever. Against such filth quarantine will avail but little. Let the South in its individual and corporate capacity keep *reasonably clean* and it need have no fear of either cholera or yellow fever.

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*Condensed from reports in the papers and medical weeklies.

Damages for Alleged False Imprisonment at the Instance of Dr. E. H. Van Dusen.

For a considerable period we have known of the circumstances that led to the mulcting in damages of the late Superintendent of the Michigan State Insane Asylum, at Kalamazoo. In his address, last May, Dr. Foster Pratt brought the matter prominently before the Michigan State Medical Society. Since then, the matter has been re-argued in a new suit, and embodied* in the argument for the plaintiff we find an excellent statement of the medical points of the case by Dr. Pratt. From this we make some extracts, as of general interest:

The medical experience of the past thirty years has demonstrated: "(1.) That the presence of insanity is the absence of sanity; that it is safe and proper to declare, as a general proposition, that the onset of insanity is the beginning of danger; that recent insanity necessarily involves danger; that, if *danger* be necessary as a basis of justification of the restraint, which is in part the treatment of the disease, it may be inferred from the disease, so that, whether danger be apparent or not, the disease justifies its proper treatment. (2.) That, with very few exceptions, the imminence or the actual presence of insanity can be readily and surely detected in its incipient stages by the alienist expert, and generally by intelligent friends before, and sometimes long before, the overt act has brought the case within police jurisdiction. (3.) It is established beyond question that either by its cure or by the arrest and prevention of its development, the *best results* of *treatment*, in every aspect of it, are obtained *during* the *forming* or *early stages* of the *disease*, and before the overt act has made the patient discard concealment, and despair of self control."

These facts the Court is asked to recognize and sanction. Insanity being a disease, and presuming danger, we ask the common law sanction of the inherent and self-evident right of the family to determine the existence, the nature and treatment of this as of any other disease. It is asked that the legal dis-

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***Argument for Plaintiff in Error. Paper, pages, 38; 1878. Kalamazoo, Mich.**

tinction between this disease, and its legal effects, be clearly made. Thus the disease can be radically treated by the family, and its legal effects by the courts, as may be necessary.

For nearly twenty years, Dr. Van Dusen has constantly given this early treatment to insane patients before they had become, by overt acts, demonstratably dangerous. In this practice he has been, at least indirectly, sustained at home and abroad. Yet, in spite of the manifest good thus accomplished, in spite of the fact that the Circuit Judge declared him to be free from all imputation of intentional wrong, he was mulcted in heavy damages, because in a case clearly requiring and greatly benefitted by it, he had used this same humane and scientific customary practice. Such a verdict seems inexplicable, except on the assumption that the harmony of such practice with reason and the common law had never been expressly declared by the courts. Such a declaration is now asked, not only in behalf of Dr. Van Dusen, but as a legal sanction by the common law of a wise and humane public policy towards all insane citizens. We have not space for the cogent replies to some popular objections to this view of the matter. In no case do these objections come from the lips of well-informed, broad, thinking members of the medical profession.

The whole matter is a graphic illustration of the fact that the advanced corps of the medical profession is almost out of sight of the average popular mind. Never was popular and legal ignorance and prejudice more faithfully portrayed than in this case. We need to go back and take the people by the hand and lead them to the point whence they can see us and in some real sense comprehend our relations to them. In this direction, in one matter, Dr. Pratt is doing good service, yet other missionaries are wanted, in fact, every honest, competent physician should daily and constantly be at this work as he goes about his daily duties.

Sugar Adulteration.

Some year or two since, our attention was directed to this matter by hearing one of our best pharmaceutical chemists remark "that there was scarcely any pure cane sugar in the market; that, more or less fully, glucose entered into its manufacture." At the time we were impressed by the fraud thus practiced, but only within a relatively short period have we been assured that these adulterations are not only fraudulent, but more or less deleterious to health. A well-known druggist reported to us the following: Using light-brown sugar to make syrup for table use, he soon noticed that his family were afflicted by ulceration of the mouth and indefinite gastric disturbances. In some way, he suspected the syrup, and ceased its use. The result was that, in a little time, the sore mouths recovered. In this case, the relation of cause and effect seemed evident. Other instances, more or less marked, have come to our notice, in which the use of certain syrups and sugars was followed by unusual disturbances of some portion of the alimentary canal.

The researches of the New York Board of Health seek to explain these instances, but in a manner lacking in definiteness. Some six years ago, a secret method was discovered by which cane sugar could be so mixed with glucose, by the aid of chloride of tin, as to produce an article that would pass as the best cane sugar. In this way, the cost of whitening sugar was diminished from a quarter to a half cent per pound.

It is entirely proper to inquire whether any of the chloride of tin remains in the sugar as sent to market, and whether, if there be any, the amount is sufficient to exert any deleterious effect upon the public health? In the reports alluded to, there is a lack of definiteness in the proofs by which the charges against the sugar refiners are sought to be sustained. In so far as the manufacture and sale of glucose is concerned, we see no cause for alarm, except that unscrupulous persons may seek to sell it for the more valuable cane sugar. Injury to health can come only from the adulterations by positively harmful substances. Where is the chemist that has found them in poisonous quantities in sugar?

Is the Hypodermic Injection of Piles Dangerous?

Attention is respectfully directed to a communication from Prof. E. Andrews, in another column, on the above topic. Let each and every reader who has had any experience in the above method of treatment at once report full details of their experience to Dr. Andrews. In this way, it is to be hoped that enough experience will be obtained from which to draw some deductions of permanent value.

Memoranda.

"When I die, I want my body to be burned."—Prof. S. D. Gross, M. D., *Med. Record*, Dec. 7, 1878.

"The essential element in the production of cerebral hæmorrhage is the existence of miliary aneurisms, and the development of these aneurisms is not necessarily connected with renal atrophy, hypertrophy of the heart, or atheroma of the large vessels."—Charcot.

The Detroit Medical and Library Association has granted to Parke, Davis & Co., manufacturing druggists of Detroit, the exclusive privilege of publishing the official record of its proceedings. In return, the firm engages to supply the Association with a considerable number of medical journals.

Rokitansky, in spite of his great work and high honors, died poor. It is said that the government continues his pension to his widow, and adds a special donation.

A recent congress of Italian physicians has decided that the publication of detailed reports of cases of suicide has contributed to the increase of this crime.

By some new experiments, Prof. Gamgee, of Manchester, has demonstrated that the liver is the principal, if not the only, organ of the body concerned in the formation of urea.

Dr. Andrew Clark, F. R. C. P., of London, gave a lecture to the profession of New York, December 10, on diseases of the lungs, illustrated by original drawings.

We note the recent death of Mr. Henry Power, senior member of the firm of Power & Weightman. His fortune of $10,000,000 is reported to have been largely accumulated from the profits of quinine manufacture. No doubt the tariff of twenty per cent. upon this article had something to do in filling his coffers.

The Chemist and Druggist, Nov., 1878, reports a fatal explosion of an oxygen retort. In this and other reported cases the binoxide of manganese was adulterated with soot or sulphide of antimony. We knew of a fearful explosion of an oxygen retort containing about two pounds of chlorate of potash and one pound of lamp-black. The person making the mixture used the lamp-black, on the supposition that it was oxide of manganese. Fortunately, no one was near at the time of the explosion, and the retort was out doors. All this shows that the previous heating of the binoxide of manganese to redness is a wise precaution.

Dr. Wm. A. Hammond has withdrawn his libel suit against the *N. Y. Med. Record.* This suit was instituted some four years ago, for some criticisms made upon an article of his on hydrophobia, published in the *New York Tribune.* Doubtless his blood has cooled, especially as he has pending a libel suit against Dr. Gray, of the Utica Insane Asylum. We do not know of another man in the profession that is so often entangled in this sort of suits against brother doctors.

The Alumni Association of the College of Physicians and Surgeons of New York, has equipped and endowed a pathological laboratory for the use of the students of this College. Prof. F. Delafield has been suggested as Director of the same. The laboratory will undoubtedly be accepted by the College, and speedily rendered available to the students. Let there be suitable chemical and physiological laboratories, and the old College will have advanced more nearly to the demands of the times.

Wm. Wood & Co. announce the following books for 1879: Delafield's Studies in Pathological Anatomy; a new edition of Cohen on the Throat; A Treatise on Hygiene and Public Health, by various able writers; the last volume of Ziemssen's

Cyclopædia; A Complete Index of Ziemssen's Cyclopædia; Living's Hand-book on the Diagnosis of Diseases of the Skin; Gerhardt's Manual of Diseases of Children; a new edition of Frey on the Microscope; Quain's Dictionary of Medicine; Book's Atlas of Human Anatomy; Seguin's Manual of Diseases of the Nervous System; Jacobi on Diphtheria.

"What illuminates a country like its scholarship, and what is the nest that hatches scholars but a library?"

"A physician of common sense without erudition is better than a learned one without common sense; but the thorough master of his profession must have learning added to his natural gifts."

"There is no book, ancient or modern, which, if it has no living value for the student, will not teach him something by its autopsy. But it is with the live literature of his profession that the medical practitioner is first of all concerned."—Oliver W. Holmes, *Boston Med. Jour.*

The Doctor, Nov., 1878, in a very common-sense article upon specialists, presents abundant proof of the following: "The most eminent specialists have not confined their attention to a single branch; they have, in most instances, commenced in a larger sphere, and have only gradually restricted the range of their practice. The more gradual the restriction has been in any case, the better for the specialist himself as well as for his patients. It is especially so for the patients, inasmuch as a man may possibly make advances in a small range of knowledge, or acquire skill in special manipulations, by at a comparatively early period confining his attention; but to be able to give the soundest advice, to treat cases most completely, it is of the highest importance he should, as long as possible, keep up his interest in every branch of our art. We admit that the 'mere specialist' must be narrow, and he who begins life as such will certainly cramp his intellect, and, even if he becomes a brilliant operator, will probably fail as a safe adviser, either to a patient or a professional brother, while he can scarcely hope to attain to the full development of his manhood."

A contributor sends us the following notes on the proper rules for choosing a doctor. Not new or original, they are worth pondering by every doctor and patient:

Avoid a mean man, for you may be sure he will be a mean doctor, just as certain as he would make a mean husband.

Avoid a dishonest man; he will not be honest with you as your physician.

Shun the doctor that you can buy to help you out of a scrape—a good doctor cannot be bought.

Avoid the untidy, coarse, blundering fellow, for the man who is clumsy in hitching his horse you may be sure is not handy at midwifery or surgery.

Avoid the doctor who flatters you and humors your appetites.

Avoid the empty blow-horn who boasts of his numerous cases and tells you of seeing forty or fifty patients a day, while he speads two hours to convince you of the fact. Put him down as a fool.

To be a good doctor, one must first be a man in the true sense of the word.

He should be a moral man, honest in his dealings.

He must have good sense or he cannot be a good doctor.

He should be strictly temperate. No one should trust his life in the hands of an intemperate doctor.

It is a good sign if he tells you how to keep well.

It is a good sign if the members of his own family respect him.

It is a good sign if the children like him.

It is a good sign if he is neat and handy in making pills and folding powders.

It is a good sign if he is still a student, and keeps posted in all the latest improvements known to the profession for alleviating human suffering.

Book Notices.

Any Book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

A HAND-BOOK OF NURSING, for Family and General Use. Published under the direction of the Connecticut Training School for Nurses State Hospital, New Haven, Conn. Cloth; pages 266. Philadelphia: J. B. Lippincott & Co.

One great need of the world is good nursing. A sign of progress in this direction is the establishment of schools for the training of nurses. These are mainly in connection with some hospital, and in so far as we have been able to learn, they are uniformly successful in turning out good nurses. The work before us has originated in the Connecticut School at New Haven. A careful examination of its pages has convinced us that it has been prepared with more than ordinary good judgment. It is wise in most that is said and in most that is not said. It is divided into three parts, devoted respectively to "Medical and Surgical Nursing," "Directions for Monthly Nursing," and "Family Hygiene." Under the first head are discussed the nurse, the room and the patient, appliances, applications, baths, rubbing, some special medical cases, temperature, pulse, respiration, urine, directions for nursing sick children in some infantile disorders, surgical nursing, disinfecting and care in communicable diseases and emergencies. The other parts are dealt with in a similar manner.

It would infinitely lighten the burdens and vexations of physicians if only their patients were familiar with the facts here presented. But if families cannot thus be taught, at least professional nurses should possess this knowledge. Each doctor could recommend this or a similar good book to the nurses he is accustomed to meet and insist that they should become familiar with its contents. We cordially welcome the book and commend it to the attention of all.

A MANUAL OF PRESCRIPTION WRITING. By Dr. Marten D. Mann; 1878. New York. Cloth; pages 155.

Every attempt to introduce more care and exactness into the art of prescription writing is worthy of great commendation. In most medical colleges the subject is rarely broached, much less fully dwelt upon. So far as we are aware this has always been so. As a result, relatively few physicians have taken the trouble to learn more than was absolutely necessary concerning this art. Those who have never investigated the matter will be astonished should they examine any prominent druggist's files.

The book before us is an honest and skillful effort to render those druggists' files more creditable to the profession. As the author points out, the text books have hitherto wholly ignored or inadequately treated this subject. Pereira, Griffiths and Garriot's are either incomplete or unavailable. The opening chapter defines the names of the separate parts of a prescription. Then we have the weights and measures, officinal and domestic, carefully described. Chapter third briefly recounts the usual officinal and unofficinal preparations. Chapter four treats of the grammatical construction of a prescription. In chapter five we find a complete list of the principal words and phrases used in prescriptions with their pronunciation and abbreviations. Following this we have given the forms for extemporaneous prescriptions, with examples in all possible forms. As cautions, the author makes the following wise suggestions: Never use any abbreviations which can in any way be taken for other than the thing meant. Write every part of the prescription with great care and distinctness. Always revise each prescription after writing to make sure of the correctness of the doses and directions. Keep a copy of each prescription on a stub. Order neither too much nor too little medicine, viz.: do not order a four ounce mixture when an ounce is all that is required. Write the directions to the patient on the prescription with the most painstaking care.

The next chapter treats of doses of medicine. Of the several methods of altering the dose to correspond with the age, all are given; but Dr. Cowling's preferred as the easiest. The dose for any child is obtained by "dividing the number of the following birthday by 24: Thus for 2 years $=\frac{3}{24}=\frac{1}{8}$ dose of adults." The table of doses is very complete, giving the dose in both ordinary and metric weights and measures. A chapter on the metric system gives a capital account of its principal features. Finally, the book closes with some suggestions respecting medicinal combinations. Altogether we can cordially commend the book to all. Practitioners will find in it matters to which they often need to refer and suggestions for an improvement of their skill in prescription writing. Medical students should master every line inside the cover pages.

The publishers have issued it in flexible muslin covers in a form very convenient for practical use.

LECTURES ON BRIGHT'S DISEASE OF THE KIDNEYS. By J. M. Charcot, Professor in the Faculty of Medicine of Paris, etc.; Translated by Dr. H. B. Willard. Cloth, pages 93. 1878. New York: Wm. Wood & Co.

Briefly, yet with a master hand, the author sketches the characteristics of Bright's disease, so far as relates to its cause, pathological anatomy and clinical history. In harmony with the English pathologists, he recognizes three varieties under the above heading, viz.: One in which the epithelium of the uriniferous tubes is first affected—(parenchymatous nephritis), one in which the interstitial tissue is first involved—interstitial nephritis, and the amyloid degeneration. In the first lectures we have a condensed statement of the latest views respecting the anatomy and physiology of the kidney, views which he constantly utilizes in the following lectures.

He thinks that sufficient attention has not been accorded to tubular infarctions of the kidney. Thus the various uriniferous tubules may be more or less completely obliterated by products secreted with the urine or mingled with it in the tortuous course out of the kidney. Of these he directs attention to the *cystalline infarctions* of the *ureter*. As they occur in gouty subjects it is quite probable that they may contribute to the production of the grave symptoms of gouty anuria or ischuria. Then, uric acid of a yellow tint may exist in the form of amorphous masses in both cortical layer and pyramids. Again, concretions of urate of ammonia or soda may accumulate in the collecting tubes. This form of infarction is found in infants from birth to nine months. Calcarious infarctions may exist in old people. Bilirubin may become concentrated in the urinary tubes and form an infarction. But the most interesting of all tubular infarctions are those designated as *urinary casts*. The importance of these casts is greatly diminished by the fact that those only can pass into the urine which are formed in Heulis' loop or in the junctional canals or connecting tubes. The reason of this is that the smallness of the descending loop prevents casts of the tubes nearer the glomerules from passing this point. Hyaline casts, they appear in the most diverse urinal affections and may even be found in the normal state.

By placing these two facts together it will be seen that the clinical importance of urinary casts has been greatly exaggerated. They are of no interest except they have been observed for a long time and in large numbers. Under these circumstances they indicate as a rule confirmed lesion of the kidneys.

The granular casts when found for a certain time at each examination of urine in copious and moderately albuminous urine, indicate interstitial nephritis. The waxy casts indicate also a chronic lesion.

But Bright's disease may exist without any casts being found in the urine, these all being retained in the pelvis of the kidney. We cannot farther follow our author in his classical discussion of this topic. All interested in the study of renal disease will rejoice that we have an English translation at our disposal. The chromo-lithographs and wood cuts materially aid in comprehending the text.

A MANUAL OF PHYSICAL DIAGNOSIS. By Francis Delafield, M.D., and Chas. F. Stillman, M.D., 1878. Wm. Wood & Co. Quarto, pages 30. Price, $2.00.

This book was designed by its authors to serve as a guide in the study of the physical exploration of the diseases of the heart and lungs. Blank leaves are inserted between the pages of text to serve for taking notes. The illustrations by superimposed plates adds to the practical value of the work. It is not claimed that there is aught new about the work, except the method of presenting well-demonstrated facts. This method appears to us to greatly facilitate the study of the physical signs of diseases of the chest. Its principal value will be to the medical student. The publishers have issued it in their best style. As to the title, we think it misleading. One would fairly expect in a work on "Physical Diagnosis" to find not only the heart and lungs treated, but all other organs to be reached by physical means in forming a diagnosis. A more correct title would have been "Physical Diagnosis of Diseases of the Chest."

ESSENTIALS OF CHEMISTRY, INORGANIC AND ORGANIC, FOR THE USE OF MEDICAL STUDENTS. By R. A. Wilthaus, A.M., M.D. Cloth, pages 257; 12 mo.; 1879. New York: Wm. Wood & Co.

This book strives to present the subject of medical chemistry to the medical students by a method differing materially from that usually pursued. First, the facts are stated by question and answer—in this way possessing some of the advantages of a quiz. Then all the facts essential to the medical student are grouped under one head. Thus, water is described under the head of monoxide of hydrogen. Proof is given of this composition by both analysis and synthesis. The law of Ampère is given, viz., that "equal volumes of all gases under like conditions of temperature and pressure contain equal numbers of molecules." Then follows the practical application of this law to the structure of water. Next, the relations of water to the animal body are stated. The characters of good and bad drinking water are then pointed out, and the means for detecting them. The article concludes with an account of the means of purifying water, and definitions of the terms hydrate, water of crystallization, anhydrous, deliquescent and efflorescent. Certainly in this way it may be fairly claimed that the essentials of water are stated. Still, to have only learned this much as here stated on these topics is, at least, to have only seen the skeleton, so to speak, of water. The physiological relations of water in the animal body cannot be stated in the space of twenty short lines. The same remark may be made respecting every topic touched. It strikes us that the book may have a value in serving to guide in the study of larger books. For lazy students the book will prove a positive damage, in that it may induce them to think that they have the essentials of chemistry when they have learned this book by heart. The author has done his part admirably in giving clear, concise answers to direct questions judiciously selected. The plan of the work by question and answer has much in its favor. Our criticism is that its scope is not wide or broad enough to fairly cover the subject. In other words, it belongs to the class of cram books, whose influence we can only regard as wholly and always pernicious to students.

TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY; 1878. Cloth, pages 228.

This is the best edited volume of the Ohio State Medical Society Transactions we have ever seen. Following the brief minutes of the meeting and address of welcome, we find an able article on the Testimony of Medical Experts, by the retiring President, Dr. W. H. Phillips. We propose to allude to this at another time, as its subject matter is too important to pass without full consideration. Maxillary and naso-pharyngeal tumors are ably considered by Dr. J. W. Hamilton. Throat and nasal affections in their relation to diseases of the ear, are treated by Dr. J. H. Buckner. "His dogma is, that when the tonsils become chronically enlarged, and resist all general and local treatment, then to excise them." The use of sub-sulphate of iron as a local remedy is well put by Dr. C. S. Muscroft. Dr. Thad. A. Reamy indicates the value of the curette in treating uterine diseases. Dr. R. L. Sweney reports on chronic inversion of the uterus. Dr. G. S. Franklin insists upon the value of quinine as an antiseptic. Dr. C. H. Reed again presents the claims of quinine as a prophylactic in scarlet fever. Dr. D. B. Smith presents a brief report on the progress of ophthalmology. Dr. Starling Loving presents quite an elaborate record of our advance in the field of practice of medicine. The volume closes with some well-prepared obituary notices. All in all, the Society is to be congratulated upon this record of its work. Still, the great State of Ohio should do far better than this.

ON REST AND PAIN, by John Hilton, F. R. G., F. R. C. S. Edited by W. H. A. Jacobson, F. R. C. S. Second Edition, 1879. Cloth. Pages, 299. New York: Wm. Wood & Co.

This is the first volume of Wood's Library of Standard Medical Authors, the entire yearly series of twelve works like the above being furnished for twelve dollars. The work before us is a capital introduction to the new scheme. It is one of the genuine good books—one worth reading by all physicians or surgeons, specialists or general practitioners. The scope of the work may be gathered from the statement that the author discusses the influence of mechanical and physiological rest in the treatment of accidents and surgical diseases, and the diagnostic value of pain. Although, by lectures and the English editions, this work has for some time been before the profession in England, the profession in America now, for the first time, have it presented at a price within the reach of all. So fascinated were we by the author's style and his facts, that we could not lay it aside until we had read every page between the two covers. Necessarily, the type, paper and presswork are of the cheapest style. Still, we think them quite good enough for medical works, and certainly good enough for the price.

LINDSAY & BLACKISTON'S PHYSICIANS' VISITING LIST.

This is one of those old-established yearly needs that every doctor looks out for and provides himself with ere the opening of each new year. Should any forget this little matter, the publishers have this year made abundant preparations to supply his particular need. Sizes and prices to suit all.

WALSH'S PHYSICIANS' COMBINED CALL-BOOK AND TABLET. Fourth Edition. Published by Ralph Walsh, M. D., 326 C street, Washington, D. C. Price, $1.50.

This edition is as handsome, correct, convenient and exact as any previous one. We are glad to hear that so many physicians have by experience learned to appreciate its superior qualities.

JOINT DOCUMENTS OF THE STATE OF MICHIGAN FOR 1877. Three volumes; 1878. Lansing: W. S. George & Co., State Printers.

THE DETROIT LANCET.

Vol. II. FEBRUARY, 1879. No. 2.

Original Communications.

Tubercular Meningitis.

A PAPER READ BEFORE THE NORTH WESTERN OHIO MEDICAL ASSOCIATION, AT FINDLAY, BY A. HURD, M. D., FINDLAY, OHIO.

Those diseases which are peculiar to infancy, and which, in the majority of cases, prove fatal, are invested with peculiar interest to the scientific and careful practitioner of medicine and surgery, and call for his most earnest study and careful investigation. We need more light, a more accurate knowledge of the cause, pathology and treatment of the especially grave class of diseases which usually have but one termination, that of death; and in that direction there is a vast field for survey and investigation open to the view of the younger members of the profession, who should feel willing to leave the ascertained truths of the profession as they are, and press onward and unfold, elucidate and establish facts which must be known in order to understand, comprehend and treat successfully those diseases which have baffled and confounded the older members of the profession. Ours is a progressive art, and in the vast arcana of nature there are hidden matters which you may unfold and demonstrate.

We should strive to save the children. They may live, but the aged must die. In the children centre the hopes of the future; the petals of their hearts are just opening to receive the dews of heaven, and those impressions which, when crystallized into form, contain the measure of our progress in all professions, and constitute our fruitions in this life.

"And one of the most interesting and important diseases of infancy, and of the cerebro-spinal system in early life, is that which is commonly now designated Tubercular Meningitis.

It is not infrequent. The mortuary statistics of New York city, as given by Prof. Smith, show that the cause of death is from one in twenty-five to one in fifty of the entire number of deaths from all causes in infancy, in that city; the proportion varying somewhat in different years." And I presume what is true of New York city will prove proportionately true in other cities and countries where like causes and pre-dispositions exist. So, therefore, you will readily see the fearful havoc which this terrible disease is making among the children of our country.

In looking over the medical literature of the past, we find more or less particular and circumstantial descriptions of the disease under consideration, the nosological classification of which has been very vague and indefinite. Dr. Whytt, of Edinburg, Scotland, called special attention to the disease in 1768, and he, noticing its prominent characteristics—the presence of serous fluid within the membranes of the brain, and in the ventricles—gave it the name of Acute Hydrocephalus. Subsequently, Abercrombie, the author of a systematic treatise on diseases of the brain, adopted the same view, and retained the same name. But more recently, Watson, in the older editions of his lectures on the Practice of Physic, while mainly adopting the nosology of Whytt, Abercrombie and others, still, in describing the disease, "wants to be understood as designating and treating of an inflammatory disease of the brain, peculiar to scrofulous children," thus laying the foundation for its true classification, indicative and expressive of its real character and pathology. Trousseau describes it as cerebral fever with meningeal maculæ, a scrofulous affection of the brain, not only prevailing among children, but occasionally attacking adults; so gradually developing and unfolding the true pathology of the disease. Still others, appropriating the results of the observations and experience of the past ages, have brought to the study of this disease the improved means of research which our age affords, with its advanced chemistry and improved microscope to illume and demonstrate the facts, and we are enabled now to pretty fully understand the true nature and pathology of the disease, though our therapy may not be very satisfactory or successful. I presume almost every member of the profession, of a few years' practice, has been unfortunate enough to have been called to treat and manage this disease; and I also have no doubt that from the general character and obscurity of the symptoms, he has been perplexed and confounded in his diagnosis. I acknowledge the fact myself; for the formative stage, in its characteristic manifestations, is frequently so obscure, so occult, that the nicest discrimination, most careful analysis and investigation of all the circumstances and symptoms are necessary in order to make a correct diagnosis; and then we are too frequently at fault. Look at the circumstances of a typical case: Here we have a bright, beautiful child, delicate in its organization, sprightly in its mental manifestations, even precocious in its mental aptitude; suddenly becomes changed in its general appearance. It is restless at night; it occasionally vomits; its bowels are somewhat constipated; it loses flesh; it is more restless than usual; it has but little or no fever; the temperature of the body is nearly normal; its pulse is not changed; it nurses well. Such symptoms are frequent in children. We are called upon to diagnosticate and treat the case. We find the child is teething. It is a very delicate and nervous child. It is not very sick. Its digestion is bad. You have fed it too much; will be better in a few days; does not need medicine, etc. We have unconsciously given our opinion; have made our diagnosis; and we have made, as a little time will show us, a great mistake, and unfortunately for us, we shall have to change our first opinion, because the progress of the disease will show us we have made a blunder, and consequently we shall have to crawl out of a very small hole, by telling the anxious and necessarily alarmed friends that the disease has changed, when there is not a word of truth in the statement. The simple fact is, from want of care and discrimination in our examinations, we have made a mistake, and we should possess the common honesty and professional manhood to acknowledge it.

Now, in this paper it shall be my endeavor to portray, as well as circumstances will permit, the disease under consideration, so as to enable us, if possible, to detect and properly diagnosticate it in its initial stages, drawing the facts, which I rely upon in the exposition of the disease, partially from my own experience and observation, but more largely from an aggregation of the facts from different authors who have treated of the disease. And where there has been so much written that is contradictory and uncertain, it is a very difficult matter to segregate the material before us so as to bring consistency and harmony out of seeming contradiction and confusion. My observation and experience have been the results of the treatment and management of ten cases which have occurred in my own practice, and several seen in consultation. One of the ten occurred twenty-two years ago, in my own family, claiming as its victim our only little boy, a child of eleven months, whose inherited scrofulous diathesis led me first to suspect and understand the relation of this disease to that constitutional vice, and that conclusion was reached after a careful and solicitous examination of Relliet & Barthey, Meiggs, Whytt and Watson, who had so completely mirrored and unfolded all of the characteristic symptoms of the disease that at the time, and since, to my mind there could be no doubt as to the relation between cause and effect in the disease under consideration.

This view has been strengthened and confirmed by subsequent observation, found true by post mortem revelations, and is now established and received as the true etiology and pathology of the disease among the best medical authorities of the age in which we live. In the consideration of the disease, I shall not, perhaps, be methodical or very systematic. I shall certainly not be able, from personal examinations made post mortem, to shed any new light on its pathology, only to confirm the observations which have pointed out tubercular deposites within the meninges of the brain as the true cause of the disease, and to state, as a firm conviction, that it is a disease to which those who possess an inherited scrofulous diathesis are peculiarly obnoxious. Not that I wish to discuss the nature of tubercle, its mode of development, the changes which must take place in normal tissue and cell development to produce tubercle, but merely to indicate the extent and the scope of the field in view, were we able to thrust our sickle into the harvest. Given, then, the pre-disposing causes, the classes of persons who are obnoxious to the disease, the diathesis which it seeks, the soil where it develops, the tubercular deposites which are revealed after death, and the constitutional proclivity which is manifested in the history of the disease, we may pass, without any more preliminaries, to the consideration of the clinical history of the disease—in other words, to the symptoms and progress of the malady, as revealed at the bedside.

The disease, for better consideration, is divided into the first, second and third stages, the prodromic, developed and progressive; or, according to Huguenin—first, the stage of brain irritation; second, the stage of pressure; third, the stage of paralysis. The period of development, the formative stage, varies greatly in duration, the time having relation especially to the general health of the child, and the tendency of the constitutional predisposition, and hence the attack may be sudden, without marked premonitions, or gradual, more commonly the latter. You will notice that the child has changed in its general appearance. It loses its vivacity and its plumpness. It is restless at night, and occasionally utters a shrill cry—the hydrocephalic cry of the older authors, which is peculiar from its piercing shrillness, and from its sudden occurrence, and seems to be the outbursting and manifestation of intense pain, almost in the midst of sound sleep. It vomits occasionally, first the ingesta, then frequently bile is mixed with the matters vomited. The bowels are usually constipated, rarely diarrhœa. Its desire to nurse at first is not much diminished; sometimes increased; rarely diminished during the first stage. The pulse shows but little alteration, as to frequency or volume. The temperature is very seldom elevated, though there are occasional flashes of fever and redness of the face. The face is alternately pale and flushed, with a changed, anxious expression of countenance, now of sadness, then sprightly. It amuses itself with its toys for a time, then seems to be worried, and sinks into fitful and disturbed sleep. The child usually avoids strong sunlight, and closes the eyes to avoid its rays. At first the general appearance of the eyes is not much changed, unless the attack has been ushered in by convulsions, which is rare. When such convulsions have occurred, then one pupil will be dilated, the other contracted, accompanied frequently by squinting and partial strabismus. After a longer or shorter time, all the symptoms are aggravated; the friends of the little sufferer are alarmed, and the attending physician becomes anxious. He makes a more careful examination. He sees in the general expression and condition of his little patient that he has a grave disease to manage; and if he has placed the trouble wholly at the door of *teething*, or to *worms*, as too many of us have done, he will have occasion to modify and correct his diagnosis. He sadly concludes that the child is very sick. Anxious faces and listening ears are turned towards him, and he remarks to them: "I am afraid the child's brain has become affected," (when the brain was diseased from the first). He sees now, in the countenance of the little sufferer, a true portraiture of the terrible disease, for disease has its symbol and its language not less than flowers, and he must be careful to read the characters correctly. But the case becomes more grave; the child is more stupid, and occasionally starts when asleep. When awake, its eyes are wide open and staring. One pupil is frequently dilated, the other normal. There is usually a slight, spasmodic twitching of the muscles of the face, with one corner of the mouth drawn down; sometimes a corrugation of the forehead, which is generally polished and glazed, as if varnished. There is alternate pallor of the face, with flush of redness; first upon one cheek, then upon the other. There is frequent sighing, and sometimes yawning. The breathing is interrupted; very rapid at times, then a long, slow, deep inspiration, as if to compensate for the imperfect expansion of the lungs during the preceding rapid and imperfect inspirations. The vomiting still persists. The bowels, at first usually normal as to external appearance, are now very much retracted, so that the pulsation of the abdominal vessels can be felt distinctly. The bowels are usually constipated. There is now fever, as indicated by the thermometer, usually not above

102° to 104°. The heart's action is feeble and interrupted. The pulse now rather slow, with an intermission about every fifth or sixth beat. There is alternately restlessness and quietude. During the restless periods, there is an almost continuous swinging, convulsive movement of one arm and hand, frequently putting the hand to the head—decubitus dorsal, with the head slightly thrown back, and the muscles of the neck somewhat rigid. There is great exhaustion of strength on the least exertion—even changing position in bed by nurse—manifested by feeble, quick pulse, pallor of face and partial syncope. Now there appears a very marked symptom connected with the peripheral circulation, maculæ, first pointed out and fully described by Trousseau, viz: a redness of the skin, a bright blush when the finger nail, a pencil or any hard substance is pushed and drawn across the skin, which is, at first, very bright red, but gradually fades away. I have verified this symptom several times in the cases which have come under my observation; and, in fact, from the little experience which I have had, the tests which I have made, and the uniformity in results obtained, should consider that the presence of red spots after pressure, termed maculæ, in the disease under consideration, is almost, or quite, pathognomonic. Although, as Trousseau points out, you may have maculæ in typhoid fever, under almost the same circumstances and conditions, yet the other symptoms, the history of the case, etc., are not the same, and the cases should not, therefore, be confounded. During the third, progressive, or stage of paralysis, we have an aggravated deepening of all the *bad* symptoms alluded to above. The pulse more irregular and frequent, weak and intermittent. There is greater heat of body, greater pallor of face, alternated by red flushes, greater prostration, increased spasmodic action, deeper sighing, more frequent yawning, progressive retraction of the bowels till the closing scene approaches, when they sometimes become swollen and tympanitic. The constipation generally continues, though occasionally diarrhœa supervenes. The eyes are wide open, bleared and staring, both pupils dilated, or one dilated, the other contracted. The forehead still smoother and more polished in appearance; decubitus the same, though the muscles of the neck are somewhat relaxed. Vomiting has pretty much ceased. The child, when aroused, still takes the breast; is sometimes even ravenous and voracious. Now, sometimes, with all of these grave symptoms present, there is, during this stage, a seeming improvement. The friends are encouraged; the eyes are brighter; the yawnings (considered a favorable omen by the laity) are more frequent; the symptoms do seem better. But, unfortunately, they are only deceptive; probably mark the period between the cessation of active inflammation and one of its terminations, that of effusion. Because, after a short time, all the symptoms are aggravated. The stupor again supervenes, gradually verging into coma; the convulsive movements of the muscles increase; the alternations of pallor and redness of the face are more frequent. The exhaustion is extreme; the heat of the body much increased. The pulse becomes very frequent and small, with marked intermissions. The agitation of the limbs is terrible to behold. The convulsive movements verge into general convulsions, or the coma becomes profound, deepening and unexpectedly progressing for days, when death comes to relieve the little sufferer and close the painful scene. Most fatal cases terminate between the fourth and twentieth days, varying according to the intensity of the inflammation, the complications that may arise during its progress, and the constitution, vigor and age of the patient. But in many cases it continues much longer, and sometimes it is surprising how long the little sufferers will linger and live, when every moment the grave symptoms manifested would seem to point to immediate death. "Sensation and all consciousness may have been extinguished; the surface have acquired an almost cadaveic aspect, and yet the patient lives on." Relliet and Barthey remark: "We have often inscribed upon our notes death imminent, and been astonished the next day to find, still alive, children to whom we had scarcely allowed two hours of life." And I now recall one instance in particular, where I had informed the friends that I should not visit the patient again, because I was convinced that the child would not live till morning, when to my surprise and chagrin, the next evening, I was informed that the child was still alive; and meantime another physician had been called, because the friends thought I had been mistaken as to the nature of the disease, inasmuch as I had predicted speedy death, and the child still lived. It lingered till the next day, and death closed the scene. You will readily see, therefore, that the prediction as to the exact time of death is often difficult to determine. But the fact as to the result is unfortunately but too certain.

The post mortem appearances, the changes which take place in the meningeal membranes and brain substance, I shall not, for want of time and opportunity, enlarge upon, only to remark that the pia mater will reveal evidences of inflammatory action, with patches of miliary tubercle adhering to its surfaces, with general changes in its structure, and that of the substance of the brain. Sometimes the presence of effused fluids, pus, and a general softening of its structure, almost everywhere the evidence of tubercular deposite may be detected. But for a very perfect, complete and elaborate review of the medical literature on the cause and pathology of the disease, the result of patient research and careful analysis of the subject, I will refer you to Huguenin's elaborate article in Ziemssen's Cyclopædia of the Practice of Medicine.

"It is of the utmost importance to diagnosticate meningitis, whether basilar, simple, or tubercular, in its first stages, since, in the simple, which is sometimes curable," treatment, to be successful, and to be of any avail, must be commenced and energetically pursued in its first stages. "To differentiate between the simple and tubercular is always difficult; sometimes impossible; but practically it matters but little which form of the disease is detected, for the treatment of both should be nearly the same, with the prospect of relieving and benefitting the patient in the simple form in its initial stage," which fact alone should lead us to be very careful in our diagnosis. In fact, so far as our knowledge now extends of the causes, symptoms, pathology, general clinical history and treatment of tubercular meningitis, the main object we have in view is to familiarize ourselves with the general character and behavior of the disease under consideration, so as to enable us to correctly differentiate between this and other forms of disease, which are more amenable to treatment, but which possess characteristic symptoms in common with the tubercular form, and so to avoid fatal mistakes and blunders in our early diagnosis. "There are many affections, not located within the cranium, where the brain is not implicated," resulting from special causes, other than tubercular deposite, viz.: Derangements of digestion, continued remittent fever, typhoid fever, and the manifestations of irregular malarious diseases, etc., which may so nearly simulate meningeal inflammation in its early stages, that it becomes very important to make a correct diagnosis, which, however, is not infrequently very difficult to determine. "Much care and unusual discrimination should be used in making our examinations. Everything should be noted—the diathesis of the patient, the physiognomy of the child—everything appertaining to its symptoms; and even then mistakes may occur, for experienced diagnosticians have failed in their opinions." But keeping in mind the clinical histories of fevers, etc., etc., you will find that in all varieties of meningitis, there are, during the initial stages, greater changes in expression of face and other concomitant symptoms than in most other diseases. There are evidences of suffering, as exhibited in the child's face and manner—expressions of anxiety and terrible agony, usually attended by vomiting and constipation of bowels, also attended by starts and twitching of the muscles, with an occasional shrill cry, afterwards followed by comparative repose. But as the disease progresses and reaches the period of compression and paralysis, then there could be hardly a possibility of an error in diagnosis, for the general symptoms and appearance of the patient are so characteristic that they can hardly point but to one disease. The alternate pallor and flushed face, the retracted bowels, the intermittent, slow, then frequent pulse, the sighing and yawning, the bleared eyes, the dilated pupil, the glazed forehead, and above all, the occasional red, maculated skin, etc., are all unmistakable helps in making our diagnosis. But I conjure the physician to be careful and survey the whole field, investigate all the circumstances and conditions of the patient, because a mistake made in the initial stage of the disease may be a fatal one.

I have already attended to the prognosis of the disease—so it is not proper for me to repeat myself only to say that it is the opinion of all observers and physicians, that tubercular meningitis at whatever period of life it may occur is one of the gravest and most dangerous diseases with which we have to deal; and opinions differ as to whether the disease is not always and under all circumstances necessarily fatal. "Before anything else," remarks Huguenin, "it should be here mentioned that simple observations at the bed-side, which are not subsequently subjected to the test of the autopsy, deserve no sort of attention; for whoever compares the symptoms of other forms of meningitis very soon discovers how illusory is the attempt intra vitam to distinguish them in a manner absolutely correct in all cases. Now, as lepto-meningitis, infantum or simple meningitis is not necessarily fatal, and may under certain circumstances be cured,—generally it is true, leaving all traces behind—we may reasonably infer that the cases reported as cured were really not cases of true Tubercular Meningitis." "We do not by any means wish to throw any doubt upon the accuracy of the observations of Hohn, Reillet and Barthey, and some others which show the principal symptoms of the disease in progressive development, but it is allowable to simply doubt the correctness of diagnosis, for, every day we see and our own experience teaches us that the most practical and skillful diagnosticians are not always able to avoid mistakes in this field." Corroborative of this opinion are the remarks of M. Guersant: "Tubercular meningitis, however early recognized, is rarely amenable to treatment; and in the second stage, I have not seen one child in a hundred recover; and those who have reached the third stage I have never seen them improve for a moment." And my own experience fully confirms and agrees with the opinions expressed above. The ten cases which have come under my observation and treatment all terminated in death, though in the advanced stage one little boy of thirteen months seemed to improve for several hours, but it was deceptive and illusory, for after a slight remission the coma was deeper, the breathing more labored and death within sixteen hours afterward occurred. These deceptive appearances frequently occur, but unless the seeming improvement is prolonged for twenty-four hours, with characteristic amelioration of all the grave symptoms, be very cautious in giving a favorable prognosis.

In a disease which is so generally and surely fatal it might seem preposterous and juvenile to indicate a course of treatment; and the variety and seeming contradictions in the modes adopted, having no settled and fixed plan founded upon a rational and true knowledge of its pathology, and none of these successful in saving the patient's life, are simply a confession of ignorance. But we are fully justified in suggesting and reviewing in a few words a plan of treatment when there is such a striking similitude between this and other brain diseases, some of which are quite amenable to treatment, for we should surely give our little patient the benefit of an error arising from our doubtful diagnosis in any given case which might come under our observation, for, experience has shown that the proper treatment of the several forms of meningitis is almost the same in them all. And then we can do much in the grave forms of the disease to palliate and relieve suffering and make more tolerable to the friends of the little sufferer the heart-rending and melancholy surroundings of the sick-room. And first of all we should be early on the alert, and watchful and careful in our examinations of sick children of a scrofulous diathesis, where there is the least indication of disturbance of health manifested, so as, if possible, to prevent the development of the disease by proper hygienic and prophylactic measures. By such a course, by adopting such means, we may be able to ward off a disease which, when once developed, is almost always incurable. "Then the true physician becomes the conservator of public health and is able to confer a blessing upon society by preventing the spread of disease in any form, rather than attempt to battle with and cure the malady when the evil is upon us."

The hygienic measures will at once suggest themselves to the intelligent and painstaking physician. But not so readily the treatment, for among the best physicians it has been contradictory and unsatisfactory. I shall not be able to indicate any well-devised and definite plan of treatment—only to enumerate the remedies used, leaving the whole matter to your judgment and skill in selecting your remedial agents. The Therapia includes in its vast uncertainties, as applied to the treatment of this disease, almost all our drugs, viz., cathartics, blisters, cold to the head, mercurial inunction, anti-spasmodics, opium, chloral, the iodides and bromides, cod liver oil, stimulants, etc., etc. I have no time to particularize or attempt to discuss the propriety of adopting any particular plan of medication where all is doubt and uncertainty, only to ask of you to study carefully and ponder well over the active and energetic treatment appropriate in the early stages of the other forms of meningitis, feeling assured that such medication and hygienic management promises better results than the treatment which is begotten of fine theory with only a grain of common sense, coupled with a desire to experiment with human life.

Hour-Glass Contraction of the Uterus.

BY JUDSON BRADLY, M. D.

Hour-glass contraction of the uterus is fortunately of infrequent occurrence. Occasional cases are reported and commented upon; teachers and professors allude to the fact that hour-glass contraction of the uterus does occur, and obstetrical writers place in their books a cut of their ideal representation of hour-glass contraction, but it seems to me we do not get a correct idea of the real thing from either the professors, lecturers or the ideal representations of the books. Some of the recently reported cases give us more correct notions.

My purpose in this paper is to try and answer three questions.

1st, What is hour-glass contraction of the uterus?

2nd, What cause or causes contribute to induce the condition called hour-glass contraction?

3rd, Why are certain of these contractions so hard to dilate, or rather why are they so persistent in their contraction?

Before answering any of these questions directly let us examine the uterus in the light of physiological anatomy. The muscular structure of the uterus is by far the largest portion of the bulk of the uterus, and is composed of bundles of unstriped muscular fibers, super-imposed in three layers. Between and around these bundles of fibers are the other smaller but no less important components of the uterine structure—the lymphatics, blood vessels and nerves as a bond of union between these component parts.

This mass of material which constitutes the uterus is not large in the unimpregnated state, and in fact the muscular fibers of the virginal uterus are not easy to demonstrate, but look at the uterus in the condition of normal hypertrophy, found in the pregnant state at full term, and we shall find the fibers of notable size, they having increased in length, breadth and thickness, and of course in strength, for we are now speaking of a normal hypertrophy.

As the envelopes and appendages of the uterus do not concern us in this paper we will not occupy time in any notice of them.

I have already said that the uterus becomes greatly hypertrophied during pregnancy. This statement is especially true of the muscular structure, which is then disposed in three layers, that are easily demonstrated. The first layer—the external—is disposed as a thin layer on the anterior and posterior surfaces of the uterus. The fibers of this layer converge around the Fallopian tubes and extend out upon them for some distance, as well as upon the round ligaments, the ovarian ligaments and the recto-uterine ligaments. I need not mention that the uterus is composed of body and neck, the neck being the most dependent portion, and that the body is hollow having an opening from below upwards, and that in consequence of the external and internal constrictions in the opening or so called cervical canal we have the external and the internal os uteri.

The fibers of the external muscular layer that pass to the recto-uterine ligament go from the cervix uteri.

The middle layer of muscular fibers, or perhaps we should say the middle layer of muscles, seem not to be definitely disposed in any one or two directions but some are transverse, some oblique and some longitudinal.

The deep layer of uterine muscles in the body of the uterus is arranged as two hollow cones, having their bases applied to each other along the middle of the body and their apices surrounding the Fallopian tubes, as a substratum to the external layer in those localities; but around the cervix, in the region of the os internum, this internal layer is arranged as a broad band of powerful transverse fibers forming a complete sphincter. Those who have had practical experience can tell how strong this sphincter may become under certain circumstances.

The blood supply is probably only indirectly if at all concerned in the production of hour-glass contraction.

The nerves that are sent to the uterus come off from the hypogastric plexus above the point where the branches from the sacral nerves join the pelvic plexus (Gray). These nerves accompany the uterine arteries between the folds of the broad ligaments and are distributed mainly to the cervix uteri, to the circular band before mentioned and in a less notable distribution to the muscular structure of the body of the uterus. There are also a few fibers from the sacral nerves distributed to the body of the uterus. The nerve fibers from the hypogastric plexus have ganglionic enlargements upon them.

I have not mentioned the lining mucous membrane of the uterus, because I do not think—as some do—that the mucous coat has any direct influence in producing hour-glass contraction.

Now, Mr. President, we have the whole thing in a nut-shell. Given a set of muscular fibers of great comparative size and strength, disposed in a complete circular transverse band, and a set of nerves distributed to that circular band whose duty it is under their normal irritability, to cause that band to contract and constrict the opening which it surrounds, how great will be the special effect upon such a constricting band if the normal irritability of those nerves becomes abnormal and causes too severe a tension upon that band of muscles? We can readily understand that we shall have a contraction that *will not relax* until those nerves are paralyzed, however much force may be applied from external sources to overcome the constriction, short of breaking continuity. Now this is precisely our case. The os internum uteri becomes gradually dilated, and also hypertrophied during the last two or three months of pregnancy, and *pari passu* with the growth of the body of the uterus. Usually this nerve irritability, before mentioned, is normal and well balanced, and consequently allows of the delivery of the fœtus and secundines, only closing the internal os after the whole has been evacuated. Sometimes, however, the nerves are excited, and cause too early and too much contraction, and those who have ever met such a contraction cannot but have a lively remembrance of the great power with which the os internum uteri can contract.

I believe that I have now answered the first question. I am aware that the older observers say that the constriction in hourglass contraction of the uterus is above the cervix uteri. Some even place it as far from the os internum as half way to the fundus, but it seems to me that Playfair is right, when he says, that the constriction is at the internal os. Those who insist upon the higher position must fail to take into consideration the tremendous elongation of the cervix which is sometimes found—amounting, in some of Bandl's cases, to as much as eight inches. With such an elongation it would be very easy for an oversanguine man to mistake the position of the os internum and place the constriction where the anatomical structure of the uterus renders it impossible for a constriction to occur.

I have indirectly answered the second question when answering the first. The abnormal irritability of the branches of the hypogastric plexus that are sent to the uterus is, in my opinion, the cause that induces this constriction of the os internum uteri. What produces the hyperæsthesia is not so easy to explain. But it seems to me that an elongated and thinned cervix may conduce to such irritability as may instrumental interference, especially a prolonged use of the forceps. Ergot was the cause of the abnormal condition of nerves in one of the cases I have seen, which now number five or six.

The answer to the third question, perhaps, is more obscure than either the first or second, but may it not be thus? A partial paralysis—perhaps a normal paralysis—existing in the hypogastric plexus during the last months of pregnancy allows the normal dilatation and hypertrophic growth to progress in the usual manner. During the delivery, a change in the relative amount of pressure on the hypogastric plexus may cause an increase in the irritability of the nerve fibers that go to the cervical portion of the uterine walls and produce a spasm of the os internum, and owing to the continuation of this increased irritability, because of the permanent removal of the pressure in a certain direction, the spasm is continued for hours, and as in Dr. N. F. Brown's case, reported here last year (see DETROIT LANCET for April, 1878, page 255), for days together.

That an elongated and thinned cervix may cause a spasm of the os internum, or in other words, an hour-glass contraction—for I am sure that spasm of the internal os and hour-glass contraction are synonymous terms—is proved by a case reported to the West Chicago Medical Society by Norman Bridge, M. D., (*Chicago Medical Journal and Examiner*, November, 1878). This was a case of miscarriage at the fifth month, in which the cervix uteri was so much elongated and distended as to enclose a pint and a half of clotted blood. This distension was accompanied by a very rigid closure of the os internum, which required a long, tedious effort to effect its dilatation and the delivery of the fœtus. Dr. Hosmer reported, in the *Boston Medical and Surgical Journal*, March 21st, 1878, the cases of four women who had dystocia from spasmodic contraction of the internal os. One of these suffered the same complication the third time, one the second, and two once each. All four died, and two of them, at death, were still undelivered. These cases were all similar—all head presentations—and all had the spasm of the os after the fœtal head had passed through and was contained in the greatly elongated and thinned cervix.

Dr. D. S. Kellogg, in the *Medical Record*, August 31st, 1878, reports a similar case, but evidently forgot the fact that the cervix uteri elongates under certain circumstances. He reported the constriction as above the internum. Dr. Gray reported, in the *Buffalo Medical and Surgical Journal*, January, 1871, a case similar to Dr. Hosmer's cases.

From the accounts, it would seem that the elongated cervix misled several of these men; but under the circumstances which attend such cases, and the natural feeling of the attending physician that *something must be done*, an excuse could easily be formed for a man who was not, at such a time, entirely calm and collected.

My own experience in these cases, practically, is comprised in the notes of five or six cases. (I found five.) One case was a miscarriage at the fourth month, and one a miscarriage at the fifth month—both footling cases. In each case the body of the fœtus passed the internal os easily, but the restriction was so great when the fœtal head tried to pass that great delay was occasioned in the delivery.

One case which I saw was an induced premature labor, between the seventh and eighth month, in the case of another physician. This case has been before alluded to. Ergot was given, both for its effect on the uterus to expel the fœtus, and its effect on the blood vessels of the brain, for this patient had become paralyzed, and it seemed desirable to arrest further hemorrhage into the brain, and prevent further softening of the arterial coats by inducing the premature labor. The labor was tedious, but the delivery of the fœtus was effected easily at last, and an effort made to remove the secundines, when it was found that the spasm of the internal os was very firm, so much so as to greatly hinder the third stage of labor. Ergot here seemed to be the cause of the abnormal irritability of the nerves.

Two of my cases were labors at term. One I saw in consultation, where the forceps had been used a long time. The cervix was elongated more than usual; there was a great deal of tumefaction of the maternal soft parts, but no narrowing of the pelvis. In this case there was a very decided spasm of the internal os, and a very persistent effort had to be made to extract the placenta.

The fifth and last case presented no definite cause, but gave considerable trouble to dilate the constriction which, as in the others, was at the internal os. All of my cases recovered a fair measure of health, so far as the labor was concerned, though the paralytic died three years subsequently from apoplexy in the non-puerperal state.

For the reasons already given, I must, in closing, Mr. President, reiterate my belief that the so-called hour-glass contraction of the uterus is *always* spasm of the internal os uteri, usually preceded by an unusual elongation and thinning of the cervix. While I do not doubt that others have honestly thought that hour-glass contractions were constrictions above the os internum, I cannot but think that they have been mistaken, and I shall confidently hope that time will confirm the correctness of my belief.

No. 1081 Jefferson Avenue, Detroit.

Absence of Anus and Rectum.

BY DANIEL LAFERTE, M.D., DETROIT, MICH.

The alimentary canal is seldom congenitally malformed. Nature seems to pay due respect to the active part it is destined to perform in supporting the life and promoting the growth of the human body. At the lower end of the canal, we meet, now and then, with a trifling deformity. Scarcely a physician in active practice has not seen a case where the orifice of the anus was occluded by a band of connective tissue interfering with the egress of fœcal matter. Should the rectum, in addition to this, deviate from its natural course, or be entirely absent, the case is a rare one, and the prognosis grave. The surgeon is not always enabled to ascertain the true nature of these cases before interference becomes imperative; this fact is considered unfortunate, as the surgeon, instead of operating in the region of the natural anus, would, it is presumed, where the rectum is absent, cut in the lumbar or iliac region. I am not prepared to pass positive judgment as to the most proper situation to operate in these cases, and it is neither probable nor desirable that a sufficient number of cases will ever occur to settle the question at issue, but a few anatomical facts, mentioned hereafter, will at least furnish material for reflection, and offer an excuse for the manner in which the patient was treated in this particular case, mentioned below.

Some time since, I was called upon by the father to see his child twenty-four hours of age. He stated that the labor had been natural, the child looked healthy, but the midwife noticed while dressing the infant, that there existed an absence of the anal aperture. I obeyed the summons, examined and proceeded to operate, Mr. Thuener, one of my students, administering the anæsthetic. An incision was made over the site of the natural opening. I cut gently and carefully until I reached a depth of fully one inch. At this stage the meconium was observed, escaping at the meatus urinarius. There was now no room for doubting the deviation of the gut, and its communication with the bladder. What should now be done? Was the operation to be abandoned here and the bowel reached in one of the other locations mentioned above? As I had already penetrated to a considerable depth, I preferred to continue where I had commenced. After carefully cutting, and working gently with the handle of the scalpel, the levator ani muscle was reached. An opening was made into it, then proceeding onward very cautiously the bowel was reached at a depth of fully one finger's length. During the operation, two arteries of considerable magnitude caused troublesome hemorrhage, which, however, was controlled by twisting the bleeding vessels. An opening was now made into the gut, and immediately an escape of meconium took place. Stitching the margins of the gut to those of the opening, which was in order now, was entirely out of the question, the great depths precluding all possibility of its accomplishment. On the whole, I looked upon the case as one of doubtful prognosis; my fears were well grounded, for on the third day the patient died of general peritonitis. On opening the abdomen, it was found that the descending colon was removed farther away from the vertæbral column than is natural, and that after reaching a point opposite the promontory of the sacrum it passed directly forward, entering the bladder at its base. A small catheter passed into the bladder and pushed along, entered the colon without meeting with any resistance. The artificial opening made into the gut was situated one and one half inches posterior to the bladder.

The question might be asked: Why did I not choose one of the recognized situations for the operation after I became aware of the gravity of the case? I was very desirous to have the child's anus in its proper place and not in his loin or groin. To my mind, the spectacle of a grown individual with such an opening in either of these situations is simply repulsive, more especially as it frequently happens that no sphincter action becomes developed around its margins.

In studies made upon the cadaver, with the view of clearing up some of the doubtful points in my own mind, I find the portion of descending colon not covered posteriorly by peritoneum to be very small, so trifling, indeed, that if the operator, in his attempts at reaching it through the left loin were to go outside of its boundaries, he could not with reason be censured for bad surgery.

Callisen, whose name this operation bears (Amussat modified it by making a horizontal instead of a vertical incision), in 1796 attempted to open the colon here without wounding its serous covering. The operation was performed at a test of the practicability of the procedure. No doubt then that it was done with great care. The subject, too, was a dead child, and yet the operator failed to reach the bowel without wounding the peritoneum. How much more difficult it would be to accomplish this in the living subject! Remembering also that in the young child the meso-colon is very long, the kidney very large and surrounded by very little fat, and that it extends far outward, thereby lessening the part that would otherwise be devoid of peritoneal covering, I fail in the attempt to offset these anatomical facts, and to understand in what respect the advantages in Amussat's operation present themselves. That the colon may be easily reached here, I readily admit; but to assert that it can be done in the majority of cases without wounding the peritoneum, I look upon as a bit of fine-spun theory to deceive the imagination, invented by the operator, for the purpose of claiming praise which he does not deserve.

If, then, our main endeavor is to avoid peritonitis, what shall we say when we turn our minds to the iliac or umbilical region, where we cannot open the bowels without incising their serous covering? The chances then of avoiding the mischief are not many, regardless of the location that may be selected; this, coupled with the idea of a fæcal opening in the back or abdomen, speaks loudly in favor of a bold attempt being made in the perineum. It is upon this ground that I justify myself for having proceeded as I did in this case, more especially as I did not discover its true nature until my incision had penetrated to the depth of an inch or more.

Reports of Societies.

Academy of Medicine.

EXHIBITION OF PATIENTS.

November 12th, 1878.

Dr. Noyes reported an interesting case of spontaneous iridocyclitis, followed by sympathetic ophthalmia.

The case, he said, was a confessedly rare one, since sympathetic troubles, as a general rule, are the result of some traumatic injury. Dr. McKenzie, who first described the disease, sympathetic ophthalmia, about thirty-five years ago, says that "lacerated and punctured wounds, involving the iris and ciliary body, are the most active and frequent cause of this disease, and however slight the present symptoms may be, it is one of the most dangerous inflammations to which the organ of vision is exposed; it is also remarkable that the eye which suffers sympathetically is generally more completely destroyed than the one which received the injury." Such is the case with this patient; although the inflammation was not of traumatic origin, the danger in the latter case is just as great. The sympathetic trouble made its appearance about six weeks after the first attack; when the patient came under his observation, the right eye (the first affected) had already passed through the active stage of inflammation; the pupillary margin was firmly adherent to the lens (synechia posterior). A solution of atropia (6 grs. to ℥j) proved ineffectual in breaking up the adhesions. The sympathetic trouble was fully developed; no adhesions had as yet taken place in the pupil of the left eye; the inflammation, which now involved the whole interior of the globe, was actively combated by the abstraction of blood from the temple, and by the instillation of atropia, but there appeared little hope of staying the disease; practically, there was little or no vision in the left eye. With the right, which is gradually improving, the patient can now read No. 5 Jaeger's test types.

Unquestionably, in this state of affairs, subsequent treatment is to be directed to improving and preserving the vision of the right, or the eye first affected, and this may call for grave surgical treatment. For instance, should the left eye, besides being useless for vision, offer any hindrance to a complete recovery of the fellow eye, from reflex irritation, it may become necessary to remove it.

Verbal Communications.

Dec. 10, 1878.

Dr. Cleland reported the details of a case of suppurative pericarditis. No one offering to make any remarks upon the subject, Dr. Andrews was called upon.

Dr. Andrews—I have never met with such cases, and, therefore, can say nothing from my personal observation in the matter. I have had one patient whose pericardium I have always regretted not having tapped, for in the post mortem examination, we found within it more than two gallons of clear serum. But as the dullness extended over the whole front of the chest, the diagnosis of a large consultation of medical men was enlargement of the liver.

Dr. Cleland—Last Tuesday, Dr. Thomas removed a few deciduous teeth from the mouth of a child, but towards morning, Wednesday, the hemorrhage from the cavities became so great that Dr. Hoke was called in to check it. Wednesday afternoon, the blood having started again, with the assistance of Dr. E., Dr. H. etherized the child and cauterized the cavities. Again, that night, hemorrhage set in, even to syncope, and being sent for, I checked the flow by passing a red-hot needle up the cavity. On the separation of the slough, the blood again commenced to flow, and thus it has gone on until this morning, since which time the wound is quiescent. The child nearly died once before from the effects of a nasal hemorrhage. An uncle of the same person died from a hemorrhage from the mucous membranes.

Dr. Walker—A short time ago, I reported the details of an operation, which I had performed two weeks before, of an extirpation of the rectum on account of cancerous disease. As I told you before, I was called to see the patient by Dr. Carstens. The patient stayed in the hospital six weeks after the operation, and departed, feeling very well. He makes use of a quantity of oakum, held in place by a bandage, to replace the function of his lost sphincters. He is now working at his trade in a bakery. I cannot insist too much upon the value of irrigation in such cases, for I believe it is the means of preventing blood-poisoning. Three weeks since, I assisted at another operation of the same kind, and the patient is now doing very well. In this man, however, the sphincters were not removed.

On motion, the meeting was adjourned.

E. A. Chapoton, Sec.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Medical Legislation.

There is much indefinite talk concerning medical legislation. The phrase " medical legislation " means one thing to the educated doctor, but quite a different thing to the uneducated. Even among the best class of physicians, there is a vast difference of opinion, not only as to what is attainable, but as to what is desirable. Far more do these differences exist among the people. With such differences as to the matter itself, it is no wonder that there should be equally diverse views respecting its advisability. For many years we have studied the matter closely in the efforts made in our own State, in the operation of the laws as established in Canada, in Illinois, in Ohio and in New York. The advocates of medical legislation claim that these laws, by their actual working, have wrought a great good to both laity and profession. Their opponents in those States and elsewhere are just as positive that evil to all concerned has been the outcome of such laws. It may not be out of place to briefly state some of the reasons adduced on either side. The advocates of medical legislation claim (1.) " that thus good, educated physicians are guaranteed to the people. Because, if all entering upon medical practice possess diplomas from a reputable medical college, or if they satisfactorily pass a legal examining board, they must have knowledge. (2.) By weeding out all who have no diplomas or certificates, a more open field is left to the properly qualified. Hence, better rewards can be had by the worthy for their labor. (3.) It is not doubted that this weeding out can be accomplished by legislation. (4.) In this matter the State guarantees to its inhabitants properly qualified medical men. (5.) Medical colleges will be stimulated to produce better material, and so their grade be elevated. (6.) In the attainment of these beneficent results, it is claimed that all good citizens, equally with the profession, will work in harmony. (7.) Besides this legal method, no method is seen by which the ravages of quackery can be prevented. All else than the strong arm of the law has failed.

Those who oppose medical legislation argue somewhat as follows: (1.) Legislatures are notoriously uncertain, the acts of one session being repealed by the next—the acts of one party being cast aside by the other, as it comes into power. Hence it is that unless constant control of the legislature be had, there can be no stable legislation. (2.) The execution of any laws obviously rests with the people, and unless a popular sentiment be decidedly in favor of certain laws, these can be executed with difficulty, or not at all. (3.) Under this state of things, it is thought that medical legislation would really be in the hands of ignorant demagogues, to be changed and modified, not in the interests of the people or profession, but in their own or party interests. In short, rulers and judges are made in and over a profession of which they are almost wholly ignorant. Hence their position is liable to be used to satisfy greed of gain or political honor. It is believed that such ruling will, in the end, result disastrously. (4.) For these reasons, it is claimed that a good medical law could not be devised, or if devised, it would be a dead letter. (5.) Again, to have a monopoly given them, it is thought, would remove that stimulus to active, constant effort, so needful to the most advanced success. (6.) Besides, it is claimed that, as the people are the real rulers, the most philosophical plan is so to educate them that they may be able, of their own accord, to separate the ignorant from the learned, the skilled from the unskilled. Especially is it stated that under our form of government the above line of action is most likely to be successful in the long run. Here, and now, we do not propose to argue these and other points that may be adduced, pro or con. We present them for consideration, as it is better to be sure one is right in advancing in any direction. Just now, another effort is made to promote medical legislation in Michigan. At date of writing, we have not seen the bill introduced, and hence we can only speak of the matter in general terms.

We shall take it for granted that it is a wise, well-considered one, commending itself to the support of all medical men, the best people of the State, and the various State institutions. If it be such, its success is assured in so far as passing the Legislature is concerned.

Meantime, whether or not such a bill becomes a law, let every doctor take it upon himself to so utilize his relations to the community in which he lives as to aid in its education in matters pertaining to physiology and its subordinate hygiene and sanitary science and so enable the people to appreciate the best medical men. This will render more effective a good medical law; or if none be passed, it will largely cut off the demand for ignorant pretenders. The people must be taught, in some degree, to comprehend and appreciate the best medical men ere they will let go of charlatans.

Caring for Delinquent and Dependent Girls — A Means for Checking Syphilis.*

This paper discusses a topic closely connected with the physical welfare of the race. The writer points out the fact that in Michigan provision is largely made for dependent and delinquent boys, but no such provision is made for girls of the same ages. He shows that this lack of provision results in the formation of all sorts of vicious lives, and especially those of prostitution. These young prostitutes, in turn, prey upon young boys and men in a thousand ways and places. This is scattering the seeds of disease, disgrace and death. He calls attention to the fact that in America the mere girl may travel, in almost perfect safety, anywhere, while the boy is beset at every turn by the temptations before alluded to. Hence it is that in the interests of the boys, as well as the girls, a State institution should be provided that would take innocent girls and train them for the useful lives of good citizens. Further, a reform school for girls should be established to receive those girls who commit petty larceny or other minor crimes, just as we now have one for boys.

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*Dependent and Delinquent Children, with Especial Reference to Girls. An address to the American Social Science Association, May 23d, 1878. Paper, pages 16. Michigan State Board of Health.

At present, the only place to which such girls can be sent is the Detroit House of Correction. As magistrates are aware that to send a woman or girl there is to confirm her in her evil course, they refrain from so doing so long as they possibly can. For the same reason the police fail to notice the minor vices of this class, until individuals have gone so far as to preclude all hope of reform. It strikes us that in this matter we have a clue to one method which will do much to stamp out prostitution and its attendant—syphilis. Let all the dependent girls be provided with healthful homes, in which they may be taught the essentials of a proper life, and we have a pretty firm conviction that but few of them will furnish recruits to the ranks of prostitutes. Give all the pauper girls healthy employment and suitable education, with a pure environment, and we will have not only escaped the devastation of their prostitution, but also added materially to the good, healthy blood of the race.

Here is a field in which all physicians, philanthropists and good citizens may labor without difference of opinion. To us the plan is far more feasible than that of quarantine, or license, or examination. Take the girls, who demonstrably in the main recruit houses of ill-fame, and train them for a proper life, and so far prostitution is checked. Not only this, but the thousands of young men who, by their efforts, would have been inoculated with syphilis, are now kept from overpowering temptation, and so, in an untainted state. Let the people of the land once enter upon this matter in earnest, and the field in which syphilis now thrives would become transformed into a very garden of physiological beauty and strength. Let it be taught everywhere that an idle, shiftless boy or girl is in danger of becoming a focus for the spread of syphilis, and all will grasp the rationale of the State compelling all such (or as many as it can lay hold of) to go to work and keep at work. If we read the signs of the times aright, the people are ready to receive and obey such a gospel, if only it be energetically and persistently preached to them.

Rare Cause for a Suit of Malpractice.

The *Boston Medical Journal*, November 28, contains the account of a suit for malpractice, in which a woman sought to recover from a physician ten thousand dollars damages for alleged neglect on his part, by which she suffered relaxation of the pelvic ligaments. The jury returned a verdict for the plaintiff for $4,916.67. Briefly, the facts were that the woman, in labor, was attended by a midwife until she became exhausted. The doctor was then called, found that immediate delivery was imperative, gave ether, applied forceps, and delivered without the slightest injury to mother or child. He visited her on the four following days, and on the eighth day, all doing well, he dismissed the case. This was in May, 1875. July 31st, the husband paid his bill of twenty-five dollars and made no complaint.

In June, 1876, the woman called on the doctor to inform him that she had relaxation of the ligaments of the "hip joints," and that this was his fault, and unless he paid for it she would begin a suit for damages. This was done with the result already stated. A more bare-faced robbery we have never known to take place under the forms of law. There is nothing to show, in all the evidence, that the case had been neglected; while there was much to show that the woman had not taken that care of herself needed to promote recovery. This case reminds us of some of the malpractice suits recorded by Dr. Eugene Sanger, of Bangor, Maine, as having occurred in that State. Apparently the law is worse in dealing with doctors down East than in the West, although it is hard enough here. Nearly five thousand dollars to pay for relaxed pelvic ligaments, produced by a perfectly successful and well treated obstetrical attendance ! ! If such things occur in polite, intellectual Boston, what must be the heathenlike darkness elsewhere ?

Cascara Sagrado.

Statements have been widely circulated to the effect that "cascara sagrado" was a fictitious article, and that the firm engaged in its manufacture and introduction knowingly attempted to impose a fraud upon the profession. For ourselves, our personal acquaintance with this firm was enough to convince us that it would not perpetrate a deliberate fraud in this or other matters. We knew this firm as composed of shrewd business men, having it for their object to make an honest reputation, and to obtain a fair return on their investment of brains, labor and capital. Hence we were satisfied that the originators of the damaging statements were mistaken.

But we were none the less pleased to observe that the *Pacific Medical Journal*, January, 1879, states that "cascara sagrado" is the common Spanish name of rhamnus purshiana. In short, the preparation is derived from a REAL PLANT growing on the Pacific Coast, and the name given it was that by which it has long been known to the natives of that region. As to the value of the drug, we cannot speak from experience or experiment. Many who have used it claim that it is an admirable laxative.

For ourselves, we have long believed that the forests and plains of America contained many plants, as yet unknown, of undoubted medicinal value.

The trouble and expense attending the finding, gathering, testing and preparing such for convenient use has been so great as to deter most from the undertaking. For this reason we think those should, at least, be fairly treated who have voluntarily assumed this trouble and expense. We are glad that responsible and reliable business firms can see in this work enough of reward to undertake it. Of the many drugs thus introduced, many will undoubtedly prove unworthy of a place in the materia medica, but a few will remain of permanent value. Nor does it matter that those introducing these remedies shall, on a large scale, offer to the profession as new such herbs as had previously obtained only a neighborhood reputation. To most, they are certainly NEW. In conclusion, we have to say that it is in the interest of the profession that all possible remedies shall be collected and prepared in shape convenient for administration. It is capable of selecting such as are of essential service in its work. It is to be hoped that the greatest care will be exercised in this selection, so that we may the sooner know the real truth respecting the virtues of each. We have written thus in the interests of "fair play" and legitimate progress.

Memoranda.

After January 1st, 1879, in Great Britain, it is no longer lawful to buy or sell by weights or measures according to the metrical system.

M. Marey was elected December 2, 1878, to the vacant chair of Claude Bernard in the section of Medicine and Surgery of the Academy of Sciences, Paris.

The announcement of the death of Dr. Bazin, so well known to the medical world by his works on dermatology, has been lately received.

A piece of loaf sugar soaked in table vinegar makes a capital remedy for hiccough.

A gynæcological society has been formed in Chicago, giving promise of usefulness and vigor.

The mortality report for Lansing, Mich., gives as annual rate in 1,000 for October, 1878, 7.07, for November, 7.31, and for December, 3.53.

As a cheap self-generating disinfectant, Dr. John Day (*British Medical Journal*) recommends a mixture of turpentine one part, benzine seven parts, with seven drops of oil verbena to each ounce.

We have received the first number of a new medical journal, the *Physician and Surgeon*, published at Ann Arbor, Mich. It is a monthly of forty-four octavo pages, and is edited by members of the Medical Faculty. Price, $2.00 a year.

The evidence thus far presented to the Congressional Yellow Fever Commissioners, as detailed by the *N. C. Medical Journal*, January 7, is of the most contradictory sort. Still, as the work advances, order may be formed from confusion.

Cold feet and sleepless nights often bear to each other the relation of cause and effect. The cure is to immerse the feet for a few moments in cold water on retiring, followed by friction. Thus the feet become warm, and may be kept so by placing a bottle of hot water to the feet in bed.—*Fothergill.*

Dr. Klein has traced the typhoid fever of the pig to a bacillus. Having so cultivated this species as to raise crops free from all other organisms, he inoculated healthy pigs with a fluid containing the bacilli, and at the proper time the disease arose and followed its ordinary course.

Vick's Floral Guide, published at Rochester, N. Y., is the most elegant thing of the sort that we have seen. In 100 pages it has one colored flower plate and 300 illustrations. For five cents it will be sent to any address. *Vick's Illustrated Monthly* will be sent for one year for $1.25.

On December 4th, 1878, the foundation stone of the Ecole Fratizere, the new building of the Paris School of Medicines, was laid with imposing ceremonies. Its cost is estimated at $2,400,000. It will contain one hundred and eighty tables for dissection and six amphitheatres. It is estimated that at least four years will be required to complete the structure.

In our November issue, 1878, we stated on the authority of a correspondent of the *Chicago Medical Journal*, that "all the patients operated upon by Dr. J. Marion Sims, while in Vienna, died within ten days of peritonitis." We should have added that the *all* referred to cases of cancer of the cervix uteri operated upon by Dr. Sims' method. Cases of other characters were operated upon successfully by Dr. Sims. The full account of the whole matter can be seen in the *Chicago Journal*, September, 1878.

Dr. Landon R. Longworth died at his home in Cincinnati, of pneumonia, January 14, aged 31. At the time of his death he was Professor of Anatomy in Ohio Medical College, Dermatologist to the Good Samaritan Hospital, and Pathologist to Cincinnati Hospital, Professor of Acoustics and Anatomy of the Voice at Cincinnati College of Music. In many respects he was a remarkable man, one of most varied attainments, and of the most brilliant promise. A host of friends, professional and otherwise, mourn his sudden death.

The practice of medicine calls for a greater versatility of power, a greater depth of resources, a wider range of qualifications than any other occupation among men. A doctor must be a mechanic, a nurse, a cook, a chemist, a pharmacist, an anatomist, a physiologist; he must have the wisdom of Solomon, the patience of Job, the independence of Diogenes, the philanthropy of Howard.—*Gibbons.*

The *Medical Literary Journal* is a monthly devoted to the diffusion of Medical knowledge among women. It is edited by Mrs. M. P. Sawtelle, M. D., San Francisco, Cal. Each number contains twenty-one pages, and twelve numbers are sold for $3. Rather expensive reading, but the editor doubtless intends to make up in quality that which is lacking in quantity.

Nashville sends us with the opening of the new year the *Southern Practitioner*, a monthly of fifty pages; price, $1.00 per annum. Edited and published by Drs. G. S. Blakie, D. J. Roberts, T. C. Dow and Dr. Eve. It is rather better gotten up than the average one dollar journal, and contains far more matter of a better quality.

Some competent microscopists have been examining specimens of pork taken at random from the several packing houses at Chicago. Of the specimens from one hundred different hogs eight contained trichinæ. The number of trichinæ varied from thirty-five to thirteen thousand to the cubic inch of muscle. This disease seems to have increased in hogs during the last ten years, as at that time the Academy of Sciences at Chicago made similar examinations of pork and found only two per cent.

affected. At present, it may be said, that eight per cent. of the pork packed at Chicago is infected more or less with trichinæ. Observations go to show that a moderate number of these parasites produce no appreciable disturbance in either animals or man.

We hear so much about lack of culture in American physicians that we are interested to know the state of affairs elsewhere. The *British Medical Journal*, November 16, 1878, says: "Any one who will attend any of the societies, even those such as the Clinical and Pathological Societies, which are frequented by the flower of the rising hospital men, will often be shocked at the palpable want of culture and the absence of not only the graces, but the proprieties of diction; the want of sympathy with the scientific mind, and the strangely insular narrowness of information or reading which characterizes the utterances of many of those who must by mere efflux of time rise to positions which will entitle them to present themselves to the world as teachers of medicine." All this of London physicians.

A writer in the *Clinic* describes Dr. J. Milner Fothergill thus: "He is known among his London familiars as 'the claimant,' from his resemblance to the famous Tichborne pretender. He weighs about three hundred pounds, and he puffs and blows as he rolls along the Queen's highway, like a steam engine. His face is red, his voice is loud, and his laugh is like the explosion of a volcano. He wears in London a broad-brimmed hat, like a Mexican sombrero, and a thin coat, like an American sack. He suffers from the heat. When he takes his bandanna from his pocket and wipes the sweat from his forehead, and then clears his throat preparatory to speech, the world attends. Visiting a patient late at night, he was assailed by a foot-pad. 'What did you do?' said a friend, to whom he told the story. 'Fell on him and mashed him; he was never seen afterwards!' Yet, under these peculiarities is a genius, a true friend, a kind-hearted physician—the highest qualities of a superior manhood."

The *British Medical Journal*, December 28, 1878, presents the figures of the Register General to prove that extremes of cold make sad havoc among the weakly and sickly. Thus, the ratio in twenty large English towns rose steadily under the influence of the continuously low temperature of November and during the first three weeks of December. The annual death rate in these towns during the first twenty-one days of December was 29.7 per 1,000, against 22.6 and 24.4 in the corresponding periods in 1876–9, when the same periods were unseasonably warm. The mean temperature at the Greenwich Observatory was in 1876, 43.30; in 1877, 41.40; but in 1878, 32°. Apparently the only difference between these three weeks of these three years is the state of the thermometer. Hence to this we must ascribe the deaths of 2.046 persons in these twenty towns, as this is the excess of deaths during this period in 1878 as compared with either of the two preceding years. This increased mortality is mostly among the aged.

Whittaker says that "when the question of the propriety of introducing homœopathy into the Medical School of Naples was presented to the Faculty a few years ago, the following characteristic reply was tendered: The University of Naples is not a proper field for instruction in homœopathy, because the rational medicine which is imparted here, on the basis of the natural sciences, excludes allopathy as well as homœopathy, or any other absolute system or dogma. The study of rational medicine is as far removed from the ancient allopathy, with its blood-letting and purgation, as from the recent delusion of homœopathy, with its ridiculous infinitesimal doses and similia, similibus medication.

The *Scientific American* has been distributing samples of uranine, a recently discovered member of the coal tar group of coloring substances. It is a highly fluorescent body, one grain imparting color to five hundred gallons of water. If an atom be sprinkled upon a glass of water, it seems to send into the water bright green rootlets, and the tumbler soon seems filled with a crowd of beautiful plants. The rootlets now enlarge until the entire mass of water seems of a soft green color. The color varies with the position of the light.

Dr. Wm. Brodie, the veteran editor of Michigan, has assumed editorial charge of *New Preparations*. This journal will be issued monthly during this year at the price of $1.00·

The *Michigan Medical News*, a semi-monthly medical journal, is still energetically edited and published by Dr. J. J. Mulheron. It also is issued for $1.00 a year.

A new medical journal—the *Western Medical Advance*—a quarterly of twenty-four pages, is issued by Dr. C. H. Leonard, at fifty cents a year.

Each of these three journals has its peculiar features and special excellencies, which commend it to a large circle of readers.

In a review of the annual report of the Michigan State Board of Health, the *American Journal of Medical Sciences* says that in the following points the Board need fear no comparisons: (1) The remarkable tact and facility in so devising and constructing forms and circulars as to reduce to an almost incredible minimum the labor of responding to the inquiries thus made. So cunningly and admirably are their blanks arranged that the busiest or the idlest clerk or physician can hardly plead lack of time as an excuse for not filling them. (2) The Board excels in the preparation of brief tracts for circulation among the people. (3) The formal essays are also very effective in teaching the people.

The *British Medical Journal* states that the Senate of the University of Calcutta insisted on placing a homœopathic practitioner in the Faculty of Medicine. As a consequence, the other members of the faculty sent in their resignation, as they declined to act in concert with the homœopathic professor. The result was that the objectionable member was removed from the faculty, and the gentlemen who had handed in their resignations consented to resume office.

The *St. Louis Courier of Medicine* is a medical monthly born at St. Louis, Mo., January, 1879. It is published by the Medical Journal Association of Missouri, a stock company. It is edited by Dr. A. J. Steele, assisted by Dr. W. A. Hardaway and Dr. E. W. Schauffler. An extensive list of collaborators. In general plan this new journal is shaped after the *Chicago Journal.* It is well planned, and we bespeak for it the most perfect success.

Dr. John B. Biddle died in Philadelphia, January 19. He held at the time of his death the Chair of Materia Medica in Jefferson Medical College. For many years he had been its Dean. Since its organization he has been the President of the American Medical College Association. His work as medical editor and as an author are well known to most in the profession. His general courtesy and prompt good sense rendered him a capital presiding officer.

On January 3d and 4th the Advisory and Executive Committees of the American Public Health Association met at Washington. It was decided to advise Congress to create a National Provisional Commission. This commission should investigate the late yellow fever epidemic in and out of the United States, and devise a plan for a national public health organization. It was recommended that the members of this commission be appointed by the National Academy of Sciences. A protest was entered against the Lamar bill now in Congress to establish a Department of Public Health, as it was thought to give an unwarranted concentration of power.

It is generally known to the medical profession and those interested in bibliography that Dr. John S. Billings, Surgeon, U. S. A., in charge of the National Medical Library at Washington, is now ready to print his great "National Catalogue of Medical Literature," as soon as Congress grants an appropriation for the purpose. This indexes under subjects, and by authors, books, pamphlets and original papers in nearly all the medical periodicals of the world; including over 400,000 subject entries, and making ten volumes royal 8vo of 1,000 pages each. This will be of the greatest value to physicians the world over, as it enables them to find analogues for peculiar and difficult cases, and thus often to save lives. In continuation of this work it is now proposed to publish monthly, under the editorship of Dr. Billings and of his assistant, Dr. Robert Fetcher, M.R.C.S., a current medical bibliography under the title of the *Index Medicus*. It will be issued by F. Leypoldt, the bibliographic publisher, 37 Park Row, New York, at $3.00 per year, and will enter all medical books and index the leading medical journals and transactions in English and other languages.

Hospital of Minilmontant *(L'Union Medicale*, November 23, 1878.) This new Parisian hospital has just been opened for the reception of patients. Erected at a cost of about 9,400,000 francs, upon a tract of land containing 52,764 metres, it is believed to represent a type of hospital where all the improvements suggested by science have been carried into execution. The buildings are constructed on the pavilion plan; the wards are large, and contain twenty-two beds; smaller rooms, with a capacity of from one to four beds, have also been provided, so that the total number of patients to be received is about eight hundred. Each ward has a private stairway, while another staircase has been placed in the centre of each pavilion for the administrative purposes. A large chimney in each pavilion aids the regular ventilating apparatus. The obstetrical wards are in an isolated building, situated in a small garden separated from the common grounds.

Book Notices.

Any Book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

LOCALIZATION IN DISEASES OF THE BRAIN. By Dr. J. M. Charcot. Translated by Dr. E. P. Fowler. Cloth; pages, 133; 1878. Wm. Wood & Co.

Like all the writings of this distinguished author, these lectures are an example of clear, positive statement. The topics of the several lectures are as follows: "Localization in Cerebral

Diseases," "Structure of the Gray Substance of the Brain," "Considerations upon the Normal Structure of the Gray Substance of the Convolutions," "Parallel between Spinal and Cerebral Lesions," "Arterial Circulation in the Brain," "Circulation in the Central Masses," "Central Arteries—Isolated Lesions of the Gray Ganglia," "Cerebral Hemianæsthesia," "Crossed Amblyopia," "Lateral Hemiopia," "Origin of the Cerebral Portion of the Optic Nerves," and "Secondary Degeneration." Cerebral localization alone affords any ground for the hope of making a regional diagnosis of brain diseases. The subject is one that more or less presses upon the attention of every advanced practitioner. In these lectures the matter is considered in the direction pointed out by normal anatomy and experimental physiology. But as supplementary to this, there is added clinical and pathological research. The author's meaning is rendered easier of comprehension by the forty-four excellent wood cuts that illustrate the text. Amid so much that is excellent, we are amazed that this work should have been issued from the press without the trace of an index. True, the work is brief, but this is no reason for omitting a full index. More than half the usefulness of a work depends upon its index. The time of most scholars is too valuable to be uselessly wasted in looking through an entire volume for that which ought to be seen at a single reference. But in spite of this defect, we heartily commend the book to all students of nerve disorders.

DIFFERENTIAL DIAGNOSIS. A Manual of the Comparative Semeiology of More Modern Diseases. By Dr. F. de Havilland Hall. Cloth; pages, 206. Philadelphia: D. G. Brinton; 1879.

The American editor has added to Dr. Hall's synopsis of the diseases of the larynx, lungs and heart, a synopsis of other frequently occurring and important diseases. Thus he has really constructed a new book, having all the valuable characteristics of Dr. Hall's method. In this tabular arrangement, especial attention is given to the early and often overlooked signs of the presence of disease, to symptoms pathognomonic of pathological conditions, and to any features of disease peculiar to America. Specifically we find chapters thus tabulating the following classes of disorders: Fevers, diseases of the blood, diseases of the nervous system, diseases of the respiratory organs, diseases of the circulatory system, diseases of the digestive system, and diseases of the urinary system. A close examination of the several tables has convinced us that the work has been performed in an exceptionally faithful manner. The uses of such a work to the medical student are manifold. It will serve as a skeleton about which he can arrange the facts obtained from the study of larger works. Then, as a guide in selecting the works desirable to be studied, it will fill an actual gap. To the older practitioner, it will afford the means for a rapid comparison of allied affections, and so greatly aid in clearing up a difficult diagnosis.

A COURSE OF ELEVEN LECTURES ON PHYSIOLOGY. By Dr. Jas. T. Whittaker, Professor of Physiology, Ohio Medical College. Cloth; pages, 289. Cincinnati, O.: Chancy R. Murry; 1879. Price, $1.75.

These lectures were delivered at the beginning of the course on physiology at the Ohio Medical College. The author's object was to fairly place before his class the foundation facts and principles of physiology. The topics discussed are: "The Influence of physiology upon practice," "The conservation of force," "The origin of life, and the evolution of its forms," and "Protoplasm, bone, muscle, nerve and blood." From this account of their origin, we must expect no new facts—only a remoulding of old facts to meet a particular need. This process of remoulding is admirably done, not only for the use of first course students, but for all who desire a clear, concise statement of the matters discussed. We could hope that every doctor in the land, and every intelligent person, would read these pages, because we are perfectly satisfied that the change of thought thus induced would redound to the advancement of general medicine. It is as true now as in the days of Harvey, that most physicians know little of physiology, and care still less. Its truths are to them not practicable, viz: They do not directly enable them to make money or treat disease. Of course this conception arises from a total ignorance of the first principles of physiology, and the only way in which it can be eradicated is by the better teaching of these principles.

NAPHEY'S MODERN MEDICAL THERAPEUTICS. A compendium of recent formulæ and specific therapeutic directions. Sixth edition; 1879. Philadelphia: D. G. Brinton.

Within a year, the fifth edition has been exhausted, a fact speaking clearly of the demand for its existence. Into the new edition have been incorporated the facts brought to light by another year's experience, making it a veritable year book on practical medicine. Almost every part of the work has been re-written, so thorough has been the revision. To the index of authors, nearly two hundred new names have been added. We may add that not every vaunted remedy or mode of treatment is to be found within these pages. The editor has, with great care, only inserted such as have a rational basis in fact. With its present scope, we are sure that this work will prove of invaluable service to all who are conversant with its pages. Even the diligent reader of medical journals will here find an invaluable condensed and classified resumé of their contents.

CONSPECTUS OF ORGANIC MATERIA MEDICA AND PHARMACAL BOTANY. By L. E. Sayre, Ph. G.; 1879. Cloth; pages, 220. Philadelphia: D. G. Brinton.

This volume treats of drugs, vegetable and animal, their physical character, geographical origin, classification, constituents, doses, adulterations, etc. We also have appended a table giving the tests and solubilities of most of the alkaloids. Of course, within the limit of these pages we need look only for the exhibition of the salient points respecting the drugs discussed. The work opens with a chart of botanic materia medica. Here, in paralleled columns, we find given the natural order of plants, their officinal names, their common names, their habitat, the part used, their constituents, medical properties, dose, and officinal preparations. This chart is of great interest to all. The young student will here find a general guide to his study, and the older one a convenient form in which to group his knowledge. Then we have a geographical grouping of materia medica. Following is a *brief* account of the structure of plants. Next, we have a concise statement of such parts of plants as must be understood in order to study them with any success. Then comes the botanical arrangement of plants. The remainder of the volume is occupied by consideration of the characteristics, constituents, adulterations, etc., of drugs. To illustrate the scope of this portion we take, at random, Sumbul: Its botanical name is euryangium; common name, musk-root. "This appears in commerce in transverse pieces, from two to five inches in diameter, and from one inch to one and one-half in thickness, with a dusky brown, wrinkled exterior, and an interior porous structure, consisting of coarse, irregular, easily separable fibres, musk-like odor, bitter, balsamic taste. It contains sumbulic acid; medical properties, similar to valerian." In no book have we ever seen so brief and so accurate a description of the several articles of the materia medica. To all students of this branch it will prove invaluable. Here is found only that which must be remembered if any intelligent idea of the subject is retained. In most test books it is very difficult to separate the wheat from the chaff, and valuable time is lost during the process of sifting. But in the volume before us all is wheat.

HABITUAL DRUNKENNESS AND INSANE DRUNKARDS. By Dr. John Charles Bucknill. Cloth; pages, 103. Land, MacMillan & Co.; 1878. Price, $1.00.

This volume contains a variety of papers on the above general topic. Most of them were in reply to some attack upon the author's views respecting the treatment of drunkards. Thus they are, to say the least, often couched in language more forcible than amiable. Drunkenness he regards as a vice, and not as a disease. He defines a vice as a habit of the nervous centres of energizing in an emotional direction, mischievous to the well-being of the individual and of the community, but consistent with healthy nutrition, and not necessarily tending to diminish or destroy the vital activities of the individual.

Disease is a condition of some one or more parts of the organism, inherited or acquired, which always involves and implies an abnormal state of the nutrition of those parts, and does necessarily tend, if prolonged and increased, to diminish or destroy the vital activities of the organism.

A vice is to be cured by the establishment of a contrary habit—by education and reformation. A disease is cured by a re-establishment of a healthy nutrition.

The author spent some time in America, examining our asylums for treating drunkards. From this study he became convinced that these institutions served no good purposes, and had better be abolished. Especially does he oppose the transplantation of the system to England. The book, in spite of certain objectional expressions, is well worth the study of those who have a desire to ameliorate the condition of drunkards.

VARIOLA. Its Causes, Nature and Prophylaxis, and the Dangers of Vaccination; by Dr. C. Spinzig. Paper; pages, 86. 1878. St. Louis, Mo: Buxton & Skinner.

The points sought to be established by this pamphlet are: (1) Variola is dependent upon general causes, common to other diseases, and as an epidemic is dependent upon meteorological variations irregular at the locality and season. (2) The eruptive characteristics by which variola is recognized are but transitory phenomena, and are necessitated resultants of the operations of physical laws. (3) The doctrine of "specific infection" cannot be supported, and "contagion" is only possible by actual inoculation with small-pox pus, the effects of which do not differ from those produced by inoculation with other decayed animal matter. (4) "Vaccination" is tantamount to "inoculation," and constitutes *septical poisoning*, a criminal offense to human health and life, and is statistically proven to afford no protective or mitigating power over small-pox, and scientifically, in the nature of the case, it cannot possess any. (5) Prophylaxis and amelioration are only to be found in sanitary measures that promote health in general. We have not either space or patience to more fully enter into a statement of the s views. As a substitute for vaccination, he proposes hygienic measures, quinine and chloride of sodium. After a somewhat careful study of his positions, we are satisfied that he has not made out his case. The pamphlet is worth reading, if for nothing else than to demonstrate the crookedness of human reasoning.

FOURTH ANNUAL REPORT OF THE ASYLUM AT WALNUT HILL. Hartford, Conn. 1878. Paper; pages, 26.

It has widely been doubted that asylums could materially benefit the drunkard. The Superintendent of the institution whose annual report lies before us is not one of the unbelievers.

Although only established in 1877, and possessing a small building, with insufficient means, this report tells us that forty-two patients were treated during the year. Of these, ten recovered, twenty were greatly benefitted, four not benefitted, and one died.

From an insufficiency of funds, only pay cases could be received, thus limiting the usefulness of the institution.

As to the causes of drunkenness, in eight cases it was traceable to inheritance from parents; in thirteen cases, from grandparents. In six cases it came from insanity in parents, and in seven cases from defective brain organization of parents. In four cases it could be traced to sexual excess and unhealthy surroundings. Overwork and unhealthy living were prominent in twelve cases. Among other exciting causes were exposure in the army, mental strain, exhaustion in business, sudden changes in living and labor, idleness, bad company, etc.

By recovery is meant "a restoration of the physical health, and a return of the mind to its normal state, manifest in healthy thought and living, with earnest desire and exertion to get well." To accomplish this it is necessary that there be long abstinence and a perfect control of all the surroundings and conditions of medical treatment, etc. When health returns, the patient must be taught to recognize the conditions and sources of this disease, together with the means to prevent and bring relief when it returns. If he recovers, and has learned this, and exercises ordinary prudence in the future, his cure is complete. Illustrations are given of the beneficial results of treatment, and facts are cited showing how desirable it is that all drunkards should thus be cured of their disease.

RESTRICTION AND PREVENTION OF DIPHTHERIA. Pages, 8. Issued by the Michigan State Board of Health.

This paper was intended for use by the people, and for this purpose has been widely scattered among them. On the whole, it is compiled with good judgment, and will undoubtedly promote the interests of health. If generally heeded, it would put a stop to nearly all epidemics of this fearful disorder.

TREATMENT OF STRUMOUS DISEASE BY THE SOLFATARA METHOD. BY Horatio R. Storer, M. D. Paper; pages, 12. Re-print from *Boston Medical Journal.*

From a semi-extinct volcano near Naples, Italy, arises a vapor charged with sulphur and arsenic. Clinical cases are given in which persons affected with struma or tuberculosis were greatly benefitted. Dr. Storer thinks the vapor may produce its effects in various ways: (1.) By direct action in diseases of the respiratory passages. (2.) By increasing nutrition or suspending waste, or both, for which it has long been noted. (3.) As a general alterative; and (4) as a general tonic.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA, 1878. Paper; pages, 31.

This is a somewhat bulky volume of over three hundred pages. In the scientific, we find the President's annual address upon the Principles of Public Hygiene, and the Sanitary Needs of Alabama; the annual oration, by Dr. B. H. Riggs; a paper by Dr. G. A. Ketchum, on the Value of Health to the State; an extended article on Hermaphroditism, by Dr. Jerome Cochran. The same writer answers the question, What is puerperal fever? Dr. Wm. Sanders has a very readable article on the Ophthalmoscope. A paper on Euclo-metritis closes this portion of the volume. As the State Society has control of the sanitary matters of the State, the report of the State Board of Health is included in this volume.

A Conspectus of the Different Forms of Phthisis, intended as an Aid to Differential Diagnosis. By Dr. Roswell Park. Paper; pages, 19. Re-print from *Chicago Medical Journal*, September, 1878.

The essential features of this article are embraced in two tables. The first of three parallel columns compares "simple chronic apicial pneumonia," "lobular disease characterized by foci—broncho pneumonia," and "apacial catarrh." The second table compares "inflammatory phthisis," "tubercular phthisis," and "acute miliary tuberculosis." The comparison is well made, and will be of decided help to such as are not perfectly familiar with the subject.

Hystero-Neurosis, with Especial Reference to the Menstrual Hystero-Neurosis of the Stomach. By George J. Engelmann, M. D. Paper; pages, 38. Re-printed from Vol. 11, Gynæcological Transactions.

A graphic, yet accurate, account of very common affections, not infrequently misunderstood.

Official Report of the Louisville, Ky., Yellow Fever Hospital. 1878. Paper; pages, 12.

To those interested in the study of yellow fever, this report has the value of many well-observed and recorded facts. The author believes in a national quarantine, but not a local one.

On Diet and Hygiene in Diseases of the Skin. By Dr. L. Duncan Bulkley. Re-printed from the *Virginia Medical Monthly*. Paper; pages, 18.

The Local Treatment of Eczema. By Dr. H. G. Piffard. Paper; pages, 8. Re-printed from *New York Medical Record*, Oct. 26, 1878.

An excellent condensation of our most reliable knowledge upon this subject.

Address before the American Medical Association in 1878. By the President, Dr. T. G. Richardson. Paper; pages 21. Extracted from the Transactions of the Association.

Laceration of the Cervix Uteri. By Dr. Wm. Goodell. Paper; pages, 16. Re-print from the Transactions of the Medical Society of the State of Pennsylvania.

Abstracts from Exchanges.

PREPARED BY JUDSON BRADLEY, M. D., ALBERT B. LYONS, M. D., E. A. CHAPOTON, M. D.

Practical Medicine.

DIPHTHERITIC PARALYSIS.—M. Dejerine *(Archiv. de Physiologie,* The Brain, Oct., 1878,) gives an exhaustive account of researches made by him on lesions of the nervous system in diphtheritic paralysis. He concludes: (1.) There exists in paralyses consecutive to diphtheria a lesion of the anterior roots; this lesion analogous to that which is observed in the peripheric end of a cut nerve is of an inflammatory nature. (2.) This lesion was constant. (3.) The alteration corresponded rigorously with the paralytic phenomena observed during life. In cases where the paralysis was confined to the upper limbs, the alteration of the roots was not observed to extend above the first dorsal pair. (4.) The degree of alteration was in direct proportion to the duration of the paralysis. (5.) The posterior roots never presented any definite lesions. (6.) Examination of the spinal cord seemed to demonstrate that this alteration of the roots was secondary, and consecutive to an alteration in the spinal cord. (7.) This change in the spinal cord is probably inflammatory in nature; it is situated in the grey substance, without affecting the white. It is slight in amount, and has no special localization to any group of cells.

CAN ONE HAVE TYPHOID FEVER AFTER FORTY?—*(Med. and Surg. Reporter,* Dec. 7, 1878.) A correspondent of the *Lancet* puts these hard questions: Can it be seriously conceived that a man can possibly have "typhoid fever" (as people will erroneously call it) after he has passed the age of susceptibility to its influence?—in other words, when he has lived so long as to have nothing of Peyer's patches left in him. The thing is physically impossible; and if, after the age of forty, cases really crop up, the time has arrived for framing another new and sounder pathology of enteric fever than the generally received one of to-day. Now, then, accepting current pathology of the subject as infallible, the question arises, why should forty be singled out as the limited period of liability, and the succeeding years past the prime of life as the period of immunity? The reason is simple. It is this: Forty years is the time of life when Peyer's patches (the special seat of lesion) begin to degenerate, and enteric fever cannot touch the advanced in years, because Peyer's glands are absent in the old. *Ergo*, I am at liberty to question the diagnosis, "typhoid fever," in such an individual.

CHLORAL AS AN ANÆSTHETIC FOR CHILDREN.—(*Jour. des Sciences Médic. de Lille*, Dec., 1878). M. Bouchat has already called attention to this use of chloral. M. Redier, of Lille, offers the following contribution:

1. Chloral, in sufficiently large doses, always produces in children a profound sleep, approaching to anæsthesia.

2. In incomplete anæsthesia from chloroform, the patient feels the pain, and manifests his sensations by cries, as in anæsthesia from chloral; but, while in the first case memory is preserved, in the latter all recollection of what was done is lost, which is of advantage in the case of children.

3. Chloral given in large doses to the latter (2–4 grammes) gives rise to no trouble. In the only fatal case recorded, 5 grammes was given to a child less than three years old.

The necessary doses for anæsthesia are: From 2 to 4 years, 2 grammes; from 4 to 8, 3 grammes; from 8 to 12, 4 grammes. It should be given in one dose, while fasting.

4. Sleep comes on very quickly. The operation should be performed about an hour or an hour and a half after the child has fallen to sleep. Five hours is the usual duration of the sleep, during which the respiration and the circulation preserve very nearly the normal type.

5. This method of anæsthesia can be advantageously employed for the extraction of teeth, destruction of naevi, application of caustics, opening of abscesses, and for long and painful dressings, as of extensive burns.—*Lyon Medicale*, Dec. 29, 1878.

STATISTICS OF CASES OF POISONING.—(*L'Union Medicale*, Dec. 10, 1878). Some one has lately examined the records of all the cases of poisoning which have been noticed by the police of Paris during the last ten years.

There were 617 cases, of which 190 were fatal, 285 gave rise to disease, and 142 were followed by no evil results.

Two hundred and sixty women and two hundred and ten men have been accused during this period of administering poison.

Almost every poisonous substance known in France has been employed for this purpose. Arsenic killed the greatest number, as almost one-half of the cases recorded were poisoned by this agent; 232 deaths occurred from its use.

Phosphorus comes next, as it is easily procured by steeping matches in water. Such a solution was administered to and killed 170 persons. Sulphate of copper caused the death of 77 persons, and verdigris that of 33. Sulphuric acid was administered to 30 people, all of whom died; while cantharides determined 24 deaths. Among the poisons less frequently employed we find opium, hellebore, antimony, copperas, nitric and hydrochloric acids, ammonia, mercury, stramonium, nux vomica, carbonic acid gas, ground glass and belladonna.

THE HYPODERMIC USE OF BELLADONNA IN "CONGESTIVE CHILLS."—(*Ohio Med. Record*, Nov., 1878.) Dr. T. W. Rankin highly recommends the hypodermic use of belladonna in congestive chills, not only as a valuable adjunct, but even as the *prime remedy*. He relates the record of four cases as best exemplifying the type of the disease and his method of treatment. The patients presented about the following symptoms: Loss of consciousness, no pulse at the wrist, face, trunk and extremities moist and cold, breathing stertorious and superficial, eyes glassy and pupils not responding to light, etc. He administers tincture of belladonna in ten-drop doses hypodermically at short intervals, until the pulse is felt at the wrist. Before the return of another paroxysm, he gives large doses of quinine per os, as in any severe intermittent.

CONDITIONS OF THE TONGUE VALUABLE IN THE DIAGNOSIS OF GASTRIC DISORDERS.—Dr. Wilson Fox *(Med. Press and Circular)* gives, as valuable aids in the diagnosis of gastric disorders, the following conditions of the tongue: (1.) Dyspepsia, with distinct atony of the stomach. The tongue broad, pale and flabby, the papillæ generally enlarged, more especially at the tip and edges. (2.) Dyspepsia from irritative causes. The tongue is redder than usual; often of a bright, florid color, or even raw looking. It is often pointed at the tip, which, together with the sides, presents an extreme degree of injection, the papillæ standing out as vivid red points. This form is often associated with aphthæ, and is most common in scrofulous children and phthisical adults. (3.) Dyspepsia from excessive or hurried eating is apt to present a tongue uniformly covered throughout the greater part of its surface with a thick fur, whitish or brownish, with some degree of enlargement and redness of the papillæ at the tip and edges. (4.) Neuroses of the stomach display a tongue which, as a rule, is clean, though often pale, broad and flabby.

CONTAGIOUSNESS OF PHTHISIS.—Dr. F. J. Bancroft *(Am. Med. Bi-Weekly*, Jan. 4th, 1879) expresses the opinion that phthisis may be communicated by the sputum, expectorated in the streets, becoming adherent to particles of dust, and thus entering the lungs.

Also, in the later stages of the disease, by the exhalations from the body, which infect the bedding and are deposited on the walls, floor, furniture and ornaments, to be inhaled by the next occupant of the room, unless more than usual precautions are taken to disinfect it.

For these reasons, he says, health resorts lose their efficacy just in proportion as they are more or less frequented. If crowded with phthisical patients, the streets and dwellings soon become polluted, the atmosphere loses its purity and the locality "that once afforded benefit to the invalid now furnishes poisonous air for his destruction."

METALLOSCOPY AND METALLOTHERAPY.—Dr. J. Hughes Bennett (*The Brain*, Oct., 1878) discusses at some length the facts relating to the external applications of metals in treating disease. All these facts, he thinks, may be explained by the action of the mind rather than the metals. Among the reasons adduced for this view are: (1.) These phenomena occur for the most part in women and in persons of a hysterical temperament, who are proverbially prone to rapid and sudden changes, readily induced by emotion or expectant attention. (2.) None of the effects resulting from the application of metals are inconsistent with what is well recognized as the influence the mind possesses over the body. (3.) The symptoms of anæsthesia and analgesia are so changeable and unstable as to render it difficult to say positively when they are directly affected by remedies. (4.) The facts that the action of metals has been in the hands of the writer uncertain and inconstant, many of these inducing similar effects at different times, and any particular one causing diverse actions on separate occasions; that no metal is apparently specially suitable for any given patient, for that which fails at one time may succeed at another, and that no metal at all is required, discs of wood having produced all the alleged phenomena, would seem to indicate that the effects of metal lotherapy are of mental, and not of physical origin, and that, however highly endorsed, we should pause before accepting too readily a theory which appears to be only a revival of a long exploded doctrine.

KISSING AS A MODE OF COMMUNICATING DIPHTHERIA.—The *Brit. Med. Jour.*, Dec. 21, 1878, in discussing the death of the Princess Alice, calls attention to the fact that in her family, seven members, living under the most favorable sanitary conditions, were attacked by the disease, and that the disease was most undoubtedly transmitted by kisses. Hence the moral is deduced that all parents and others having charge of children should forbid the kissing of their children by friends or occasional visitors on the *mouth*. If kissing must be permitted, let it be done on the cheeks. In this matter it is of little importance whether the disease be communicated by the patient's breath, by his saliva, by minute particles of pseudo-membrane, or by minute organisms. In either case, ***kissing*** on the ***mouth*** is dangerous. We might add that other diseases than diphtheria may be communicated by kissing on the mouth.

Diphtheria: The Nature of its Infective Principle and the Circumstances that Determine the Infection.— Drs. E. Curtis and T. E Satterthwaite were directed to solve the above problem by the New York Board of Health. Their results *(N. Y. Medical Record,* Jan. 4, 1879,) are: (1) Inoculation of diphtheritic membrane into the muscular tissue of the rabbit produces severe local lesions, and even constitutional disturbances and death. But these effects differ so in their pathology and clinical history from diphtheria in the human subject that there is no warrant for defining them as diphtheria, or for applying conclusions drawn from this inoculation disease in the rabbit to the case of diphtheria in man. (2) Effects exactly similar to the foregoing and of equal severity can, moreover, be produced by inoculation of a material not only non-diphtheritic, but non-infectious to the human subject under conditions where the diphtheritic membrane is infectious; *i. e.*, when brought into contact with the mucous membrane of the mouth and throat. The material referred to is the pulpy scraping of the upper surface of the healthy human tongue. (3) Effects generally similar to the foregoing, though not of equal intensity, can furthermore be produced by inoculation of a putrescent matter, which is not even of immediate animal origin, allowed to spontaneously decompose. (4) The foregoing inoculation effects are not due to simple mechanical irritation, for inoculations of sand produce no effect whatever. (5) Thorough filtration of a proven virulent aqueous infusions of diphtheritic membrane of putrid Cohn's fluid removes the infectious property of the same. Hence, in such diphtheritic infusion the poisonous quality probably inheres in some particular thing from which it is not separ
action of cold water. (6) Thorough triturati
lent diphtheritic membrane and tongu

percentage of salicylic acid, fails not only to remove, but even markedly to modify the intensity of the infectious quality of those substances. Hence, since salicylic acid, even in a minute percentage, is capable of permanently suspending the vital activity of bacteria, the inference is that the infectious quality of the diphtheritic membrane upon the system of the rabbit is not correlated to the vital activity of the bacteria present in such membrane. (7) If, as is not improbable, the noxious principle in diphtheritic membrane, which produces in rabbits the effects described, be the same with or even analagous to the principle which produces diphtheria in man by direct infection, this conclusion will apply to the infectious quality of such membrane in its relation to the reproduction of diphtheria in the human subject. If this be the case, it follows as an important practical corollary that there is no theoretical ground for assuming that preventing the bacteria of a diphtheritic patch from making their way through the underlying mucous membrane will, *per se*, prevent general diphtheritic infection of the system. (8) There is no relation between inoculable virulence of a diphtheritic membrane and the period within three days that has elapsed between the detachment of the membrane and the inoculation of the same, nor between inoculable virulence and gross amount of bacteria present in the membrane. (9) There is a rough relation between inoculable virulence of a diphtheritic membrane and the severity of the original case of diphtheria, so far as this can be estimated, by the termination of the case in death or recovery.

COLD: ITS EFFECTS UPON THE ELDERLY.—Dr. J. Milner Fothergill (*Philadelphia Medical Times*, Jan. 4, 1879,) answers the above question thus: In cold weather the skin is dry, perspiration is excited with difficulty; it is also cold and bloodless. The blood is now driven away from the external or heat-losing area of Rosenthal to the interior, or heat-producing area. The heat
us economized, while its production is increased. By
ments is the body heat regulated in cold external
The adjustment is not without its risks and dan-

gers. The vascular system is taxed sometimes to make the adjustment, and especially is this the case with those persons who have entered upon the vascular changes associated with chronic renal diseases or gout. Here there are hypertrophy of the muscular wall of the peripheral arterioles, a high arterial tension and a hypertrophied left ventricle. The effect of cold is to contract the cutaneous arterioles, which in their entirety contain a large mass of blood; and not only so, but the more internal arteries of the limbs feel the effect, and the hands become blanched, bloodless, and deadly cold, from the spasm in the smaller arteries. Such spasm raises the blood pressure in the arteries, and from this spring several pathological consequences. The heart may become embarrassed, or the arteries suffer. When cold weather comes on quickly, the newspapers contain accounts of a number of sudden deaths, especially in people advanced in years. Heart failure and apoplexy are the causes of sudden death, while respiratory diseases do not usually kill in less than two or three days. Heart troubles manifest themselves in the form of angina pectoris, and heart failures in diastole. The sudden rise of blood pressure offers an obstruction to the onward flow of blood, and then one of two things follows: The heart contracts more vigorously—even palpitating in its efforts to force forward the blood, or it is unequal to doing so, and becomes acutely distended. Sudden distension of the heart is a not uncommon cause of death occurring suddenly. Here the heart muscle is paralyzed by distension, and is found, at the autopsy, flaccid in diastole. This serious result is more frequent in those who are the subjects of degeneration of the heart walls. So long as the muscular tissue is in its integrity, the heart walls struggle away; palpitation and irregularity testify to the strain put upon them; but when their structural integrity is impaired, and especially when their nutrition is interfered with by atheroma of the coronary vessels, then any acute taxation is badly borne. * * Even invalids, confined to their rooms, feel the changes of external temperature in their vascular systems, and are not safe from the baneful effects thereof. The great importance of warm cl[illegible]he aged, and especially those whose kidneys and vascular system are involved in general degenerative changes, cannot be overestimated.

Physiology.

Digestion: Its Study in a Case of Artificial Anus at the Umbilicus.—Dr. J. S. Holden (*Practitioner*, Dec., 1878) reports a case in which, from hernial strangulation at the umbilicus, a permanent fistula resulted at the umbilicus. The patient lived over three and one-half years after the operation, and died because it was impossible to keep the intestines open, owing to the presence of a hard knob connected with an omental tumor which pressed forward and constantly blocked the opening. A tube was fitted into the opening, which was worn over three years. Over the outer end of the tube was placed a rubber bag. As the patient was in other respects a healthy subject, the observations made are of interest. The matter discharged through the tube was never fæcal either in color or odor, and varied with the food. Warm drinks, such as tea and soups, always started a thin, watery and painful discharge, containing part of the drink. Oils, fats, starchy food—as rice or arrow-root, also the white of boiled eggs—passed in part unchanged, and could be easily detected in the discharge. Meat of all kinds and salmon made the discharge so thick that the consequent pain and difficulty compelled her to abstain from them. Bread and butter, gruel, milk and brandy, eggs, oysters and whitefish suited her best. With these the discharge was viscid and painless. Thus the food that was mainly digested in the stomach alone or in the intestines alone disagreed much more than that kind of mixed food which is digested in both.

The presence of the umbilical anus often seemed to induce a precipitancy in the passage of the chyme. This was always more marked when starchy or fatty food formed the principal part of the diet. Beef tea never agreed, always passed rapidly and excited a painful, watery discharge from the tube. After taking the food which agreed, there was always, in about an hour, a discharge containing some parts of the food and biliary secretions; a hot drink (or a seidlitz powder) would act in ten minutes, rapidly washing out stomach and intestines.

After breakfast there was always a large flow of bile, generally following at an interval the usual food discharge. Until this dark bile passed, often to the extent of half a pint, she could not leave her room. All this time she was able to go into society at home, to walk about, to play croquet, etc. Every few weeks she had a feeling as if the lower bowel wanted to be relieved; enemata at this time always brought away several large scybala, clayey and very light in color, but without smell, evidence that some secretion still went on in the unused intestine.

THE PREVENTION OF DISEASE BY SYSTEMATIC EXERCISE.—Dr. E. T. Tibbitts *(Lond. Lancet,* Dec., 1878) discusses the above topic in a very suggestive manner. He finds that much disease arises directly or indirectly from excessive indulgence in the gratification of the senses or appetites, or some form of selfishness. He finds that by a more frequent and thorough exercise of the inhibitory powers of the will, much disease might be prevented. He shows that the efficiency and power of the will may be materially increased and strengthened by systematic exercise. He also gives some reasons for believing that the growth and development of muscle have a connection with a high moral tone. Thus: (1) Emotion is usually accompanied by certain physical manifestations, which are, to some extent, under the control of the will. Co-existent with the mental state, certain glandular and other effects are produced. Now, by exercising an inhibitory power over the muscles, it is possible to stifle or reduce the violence of the emotion. By systematic exercises the muscles develop, become more powerful, act more readily, and thus lead to a more efficient control of the feelings. At the command of the will, the muscles are kept at rest, glandular and other effects are less marked, and finally the emotion gradually dies away. (2) The muscular condition of one who has determined to execute his plans is one of contrac- (3) Muscular exercises produce power and the readiness to act in obedience to a wish must engender confidence. This confidence in the ability to act is a mental process, springing out of physical strength. (4) Systematic exercises assist in the control of the feelings and appetites. Thus the energy thus expended cannot seek an escape by those passions. Also, if habitual energy is disposed of by the muscular system, a habit will soon be formed in this regard.

It is insisted that in connection with these physical exercises mental and moral ones be constantly practiced. Lastly, as they become capable of understanding them, some of the laws and facts of physiology should be presented to the child. In short, education should be of the body, of the mind, and of the heart, and all at once and constantly through the entire life. With such education, life might be vastly increased in length and efficiency.

FATS: THEIR PREPARATION FOR ABSORPTION.—Dr. J. Gad (*Braun's Archiv. für Anatomie, Lond. Lancet,* Dec., 1878) points out that the mere contact of rancid oil with an alkaline solution is attended by violent commotion at the time of junction of the two fluids, which leads to the spontaneous formation of an emulsion without resorting to any mechanical agitation. Thus, if a drop of oil be placed in contact with an alkaline solution, it soon begins to exhibit amœboid movements, sending out processes which, after giving off a white milk from their borders, are again drawn in, some small droplets often remaining detached, the original drop, after a time, resuming its original circular form. If the separated droplets be isolated in another fresh portion of the soapy fluid, no new movements are observed. Thus it is shown that fats only form a good emulsion so long as they contain free fatty acids, and these become exhausted in the emulsifying process. The emulsifying capacity of the several oils differs in accordance with the degree of their acidity, with the solubility of the soap formed in the fluid, and with the viscidity of the fat. But the emulsifying power of the same oil with different fluids depends partly on the grade of alkalescence of the fluid, and partly on its power of dissolving the soaps that are formed. Common salt and bile supply conditions that favor emulsification.

Applying these observations to physiology, we know that the conditions of warmth and moisture in the stomach favor decomposition and acidification. The excess of acidity is corrected by the bile, and thenceforth, in their passage through the alimentary canal, the minutely subdivided fats and oils are continually exposed to fresh quantities of alkaline fluids, by which their emulsification is effected and maintained.

If, then, a slightly acid condition of fats is preliminary to their absorption, why do we not consume fats in a partly rancid state? (1) Cod-liver oil most easily digested is distinctly acid. (2) Fats, the acid of which forms soaps that are soluble with difficulty, give the best emulsions when only very feebly acidified. (3) We naturally consume fat almost always in combination with more or less salt, which promotes the emulsification of feebly acid oil when mingled with dilute solutions of soda. (4) That part of the canal into which the pancreatic fluid is poured is especially favorable to the disintegration of fats, and to the act of emulsification. The fatty acids thus formed combine with the alkaline fluids of the intestine, and greatly aid digestion.

A PECULIAR REACTION OF SALIVA.—(*London Medical Record*, Oct. 15, 1878. *Monthly Ab.*, Dec., 1878.)—L. Solera publishes the following note: Human saliva, whether filtered or not, whether fresh or kept for some time, possesses the power of reducing iodic acid. Saliva, in presence of iodic acid, becomes yellow, the color being due to the liberation of free iodine. This reaction depends upon the presence of potassium sulphocyanide, which it contains; a weak, dilute, watery solution of potassium sulphocyanide gives exactly the same reaction as does saliva. This reaction is marvellously delicate, to such an extent that the author is able to detect so small a quantity as 0.000,000,4 grammes of the substance. None of the other salts present in the saliva give this reaction, nor do the organic parts, mucus or ptyaline.

LENGTH OF THE FŒTUS.—(*Lyon Medicale*, Dec. 22, 1878. *Union Medicale de Rouen.*)—The following rule for remembering the length of the fœtus has been found by Dr. Delabost, of Rouen: The length of the fœtus at different periods of intrauterine life is indicated in centimetres by the square of the figure of the corresponding month. This rule, however, applies only to the first six months. Thus:

At 1 month, the fœtus measures..............1= 1 centimetres.
" 2 " " " " ....2= 4 "
" 3 " " " " ....3= 9 "
" 4 " " " " ....4=16 "
" 5 " " " " ....5=25 "
" 6 " " " " ....6=36 "

For the last three months the increase is from four to five centimetres per month:

At 7 months.................................36+4=40 centimetres.
" 8 " ....40+5=45 "
" 9 " ....45+5=50 "

Of course, it is well understood that these figures are not absolutely exact, but they are the average lengths found at the different months of gestation.

Surgery.

NECESSITY FOR MORE HEROIC TREATMENT IN CASES OF LUMBAR ABSCESS.—Edmund Andrews, A. M., M. D. (*Chicago Medical Journal and Examiner*, Oct., 1878.) "The condition of surgical literature on the subject of lumbar abscess is a disgrace to science." In the department of the treatment of the abscesses themselves the standard works by men of repute are in contradiction among themselves, and hopelessly so while they also find themselves without a solid scientific basis for their opinions and have not the manliness to acknowledge their ignorance.

"Science above all things should be candid and truthful. When shall we have a body of savants who will not only state what they know but will in humility and honesty acknowledge what they do not know?"

After speaking of Sir Astley Cooper, Chelius and Lawrence, Dupuytren, Abernethy and J. S. South, Gross, Erichsen, Athurst, Bryant, of London, Gaut, Frank Hamilton, Callender, Holmes, of England, Heath and Aven, of London, Druitt and Lister, some of whom recommended one thing and some another, Prof. Andrews says that there is no need of any confusion of ideas upon the subject. "Some truths in surgery are irrevocably settled, and they are just as applicable to a lumbar abscess as to similar collections of pus elsewhere, only they need a little more heroic energy in their application."

First. It is well known that large collections of pus undergo putrefaction when exposed to the air, and that fever and pyæmia follow at once.

Second. If an opening is made so as not to admit the atmosphere and its septic germs to a cavity containing pus, or if, after an opening is made, antiseptic injections and dressings are faithfully used, the evacuation is usually free from danger.

Third. The efficient use of drainage tubes prevents the contraction of the outlet of a deep seated sinuous abscess and admits of proper antiseptic injection, and when these injections can be made to reach every part of the internal abscess wall they almost invariably stop the suppuration with its train of attendant evils. There are peculiar difficulties of a mechanical nature to be overcome in these vast abdominal collections of pus which now demand attention and which will often require more heroic treatment than has hitherto been practiced.

The cavity of a psoas abscess is large and irregular but is notably divided into two sacs, an internal sac that is confined within the abdominal walls, and an external sac that spreads out between the skin and deep fascia. The internal sac empties into the external sac through a long, crooked and narrow outlet.

Two difficulties beset the treatment of these abscesses by injections of antiseptics. First, the sinus between the two sacs being long, narrow and crooked will, especially when blocked with pus, effectually prevent the injected fluid from reaching the internal sac. Consequently they (the injections) stop neither the suppuration or the decomposition. Second, the opening through the skin as well as the sinus between the sacs shows great tendency to contract, and when contracting they resist equally the evacuation of the abscess and the introduction of antiseptic injections. Injections sometimes reach the internal sac under pressure but often this will fail. A flexible drainage tube should be introduced into the internal sac, a comparatively easy operation when the abscess points in the lumbar region but more difficult when the pointing is below Poupart's ligament. In either case, after certain preliminary tappings to reduce the size of the sac, the external sac may be laid freely open and the interior searched with a sound or catheter for the opening to the inner sac, which, when found, should have a drainage tube carried through it well into the interior of the body, and through this tube antiseptic injections should, with force if necessary, be introduced. In old cases pointing below Poupart's ligament, it may not be possible to do this, but it will be possible, if the urgency of the case demands it, to make a dissection below Poupart's ligament, find the sinus, introduce a tube as far into the iliac fossa as possible and then commence above the ligament as if to tie the iliac artery, lift the peritoneum from the iliac muscle and feel and reach the tube inserted from below, then the fistula can be opened and enlarged upward and the tube inserted into the internal sac and brought out above Poupart's ligament. Or, if thought best to attack the abscess from the rear, cut into the lumbar région as in colotomy, keeping close to the quadratus lumborum muscle and following its inner surface inward to the psoas muscle, cautiously lifting up the peritoneum until the abscess is found. If the cavity cannot be found, an aspirator may be used to give the direction which, when found, will be followed until the sac is reached and a tube inserted.

Every patient could not be subjected to such bold treatment, but some might be found where to save life it would be necessary.

The clear course of treatment seems to be as soon as the abscess points aspirate antiseptically, running the needle in obliquely to insure closure; when the cavity is partly filled aspirate again and if necessary a dozen times, always antiseptically.

In this way no perceptible risk is run and in many cases the pus becomes more serous and the sac of the abscess is more and more obliterated, without having been opened to the air. But if pus continue to form too persistently, the cavity can be washed out at each tapping with carbolized water. Two circumstances may prevent success in this. First, the puncture of the aspirator needle may fail to heal and some day may commence to discharge. In expectation of such an event the patient should be provided with means to make a carbolized injection at once without waiting for the surgeon. Second, if the pus is filled with curdy substances which will not run through the aspirator needle or even a large trochar, then a valvular incision may be tried with an attempt at reclosure. If the valvular opening do not close, then prompt recourse should be had to the drainage tube and complete evacuation of the pus, taking all the necessary pains to introduce the tube into the inner sac of the abscess. Success will be more certainly assured by energetic and prompt measures.

TREATMENT OF ANKYLOSIS OF THE KNEE.—(*Hosp. Gaz.*, Nov. 21, 1878.) Gamgee was requested to visit in consultation with Mr. Turner, a delicate youth, aged fifteen, whose left knee had been immovable for months. The leg was at a right angle with the thigh and the head of the tibia slightly displaced backward. The joint could not be moved in any direction. Two days afterwards, while the patient was under ether, he attempted forcible extension, with the only effect at first of making very tight all the tendinous structures about the joint. With a tenotome, he successively divided all the humstrings, including the ilio-femoral ligament, and with the help of assistants, at once straightened the limb. To judge from the force employed and from the successive loud cracks, the adhesions must have been in great part bony. The joint was wrapped in cotton-wool and a plaster of Paris case applied. He did not interfere until the tenth day, when he found the wounds all healed and the straightened knee cool and painless. He first saw this plan of operation carried out by Prof. Palasciano, in Naples in 1852, and he has repeatedly adopted it with success. As a general proposition, it may safely be laid down that forcible extension of ankylosed joints, immediately after subcutaneous division of contracted muscles and tendons, is a method of treatment deserving of wider application than it has yet received.

OPERATION FOR PHIMOSIS.—*(Lon. Med. Record*, Oct. 15, 1878.) M. Hart, of Rouen, reported the latest method. Eighty cases have already been operated in this way; among the patients were old men and children, and the appearance of the parts afterwards is said to be most elegant, there being no apparent scar. The prepuce on its dorsal aspect and opposite the base of the glans is pierced by a needle carrying a caoutchouc thread; the portion of the prepuce in front of the puncture is then ligatured and the operation is finished. After three or four days section is completed. The patients do not suffer and may, if necessary, continue their ordinary occupations.—*Month. Abstract*, Dec., 1878.

TETANUS: STUDY OF FOUR HUNDRED AND FIFTEEN CASES.—Dr. D. W. Yandell *(The Brain*, Oct., 1878) reports his study of four hundred and fifteen cases of tetanus. This study points to the following conclusions: (1) Traumatic tetanus is most fatal during the first decade of life. (2) It usually supervenes between four and nine days after the injury. (3) The largest number of recoveries are found in cases in which the disease occurred after the lapse of nine days from the injury. (4) Where tetanus continues fourteen days, recovery is the rule and death the exception, apparently independent of the treatment. (5) Tetanus arising during the puerperal state is the most fatal form of the disease. (6) Chloroform has, up to this time, yielded the largest percentage of cures in acute tetanus. (7) The true test of a remedy for tetanus is its influence on the history of disease. (*a*) Does it cure cases in which the disease occurred prior to the ninth day after the injury? (*b*) Does it fail in cases whose duration exceeds fourteen days? (8) Tried by these tests no agent has yet established its claims as a true remedy for tetanus.

Michel's Paste in the Treatment of Lupus and Epithelioma.—Dr. D. W. Yandell *(Louisville Med. News*, Jan. 4, 1879) gives a full account of this preparation. It is made of strong sulphuric acid, three parts by weight, and finely powdered asbestos, or soap stone, one part. It is applied in the same way as the Vienna paste, the thickness of the layer depending upon the amount of tissue it is desired to destroy, varying from one-eighth to four-eights in depth. It dries in a few hours. When on a large surface, it gives rise to a considerably prolonged suffering, so as often to require an anæsthetic. The paste should always be freshly made. Like plaster of Paris, it is best to apply it on a dry day. To prevent its running on adjacent parts, the portion to be destroyed should be protected by tallow, or collodion. The longer the paste adheres the better, as the work of repair goes on underneath it. When it falls off, the sore is found in the more fortunate cases to be healthy, and to require only simple dressings. If the ulcer is not in a satisfactory state, the paste must be re-applied.

Nasal Polypus Treated by Injection of Carbolic Acid.—Dr. J. A. Henning *(Medical Brief)* reports a case of nasal polypus, in which he injected twenty drops of a mixture of carbolic acid, one part, and glycerine, four parts. In a month every trace of the polypus had disappeared.

Gynæcology.

Zymotic Poisons: Their Influence upon the Puerperal State.—Dr. Wm. Stewart *(London Lancet*, Dec., 1878) formulates this influence as follows: (1) In very many cases it has no perceptible influence, from the fact that the patient is protected by a previous attack of zymotic diseases. Repeatedly we see cases of puerperal women lying in the same bed with children affected with the scarlet fever without any harm arising from the exposure to the infection. These cases are always found to have had a previous attack.

(2) In simple cases of zymotic affection in puerperal women, the patient passes through it in the ordinary manner, as if in the non-puerperal state. If the zymotic poison has entered the patient so as to vitiate the secretions and discharges from the body only after the open mouths of lymphatics and veins are closed with lymph, then the septic poison, if generated by decomposition, is effectually excluded, and the simple zymotic disease runs its usual course.

(3) In another class of cases the patients are so severely affected with the zymotic poison as to determine the period of labor. Thus the poisoned blood, the vitiated discharges, and the unprotected state of the veins and lymphatics combine in accounting for the peculiar malignancy observed.

CASES OF LACERATION OF CERVIX UTERI CALLING FOR OPERATION.—Dr. Mundi *(Medical Record,* Jan. 11, 1879,) classifies these cases thus: (1) Slight lacerations, which ordinarily give no trouble whatever, but in which, under the influence of friction against the posterior vaginal wall (the uterus often being sub-involuted and depressed), the trivial extropium became a profusely secreting ulcer, gradually spreading into the cervical canal and producing the familiar muco-purulent tenacious plug projecting from the fissured os. (2) Slight lacerations, perhaps not ulcerated and non-productive in themselves of local disturbance, but still acting through the gaping and everted os, as chronic feeders of the sub-involution and hyperplasia, against which we all acknowledge our therapeutics, local and constitutional, to be ordinarily of little avail. (3) Cases of hyperplastic or cystic ectropium of one lip, in which a raw, ulcerated surface, often one-half to one inch in diameter, take the place of the lip. To excise that redundant and useless piece of tissue, slightly pare the edges of the broad cervix and restore the normal transverse os, was certainly a much neater way of curing the difficulty than by the tedious cautery. (4) Cases of laceration of the intercervical mucous membrane, with comparatively slight injury to the border of the os, which, however, is slightly patulous and funnel-shaped, often admitting the point of the index finger, and frequently everted and corroded. (5) Large granular and follicular erosions of the cervix.

In a certain proportion of lacerations of the cervix, operation is not indicated, because they produce no unpleasant symptoms, or are amenable to caustic and astringent applications.

Diseases of Women.

LOCAL DISEASE AT THE MENOPAUSE—ITS RADICAL TREATMENT.—Dr. G. E. Sursdorff, (*Med. Record*, Dec. 28, 1878,) concludes an interesting discussion of the above topic with the following:

(1) The time of the menopause as regards the inception and aggravation of disease is at least of equal importance with that of puberty or any other epoch of life. (2) While as a rule the majority of functional and organic diseases of the female generative organs decrease in intensity subsequent to the menopause, still there are a very considerable proportion of cases in which the very opposite takes place even to the extent of benign diseases becoming malignant. (3) In a good many instances these latter cases do not necessarily present decided local symptoms of the actual pathological conditions present, but are indicated by general signs which usually attract attention, chiefly because occurring at that particular time of life. (4) In no case of general or local disorder occurring just prior to or during the menopause should a local examination be omitted, which will frequently reveal at a glance the origin of the hitherto inexplicable phenomena and also indicate the therapeusis. (5) Such therapeutical measures should be radical and effective, quite regardless of this particular time of life.

Ophthalmology.

ACUTE OPHTHALMIA TREATED BY ERGOTINE.—Dr. Planat (*Journal de Therapeutique*, *Med. Surg. Reporter*, Jan. 11, 1879,) states that in purely inflammatory diseases of the eye, he has obtained great benefit from the use of ergotine. Twenty grains of ergotine are dissolved in five drachms of rose water, or glycerine, and every two hours from eight to ten drops are inserted in the eye. If there be violent inflammation of the eye lids, a cloth wet with the solution is left on the parts for some hours. In two or three days he is thus able to subdue cases of most intense blephero-conjunctivitis. In inflammations of the cornea, it is of less service, though still of positive value. In iritis, it is of great service in rapidly subduing the acute manifestations and preventing their extension to the external membranes of the eye.

GLAUCOMA TREATED BY ESERINE.—Dr. H. Knapp *(Archives Ophthalmology*, 1878,) gives the results of treating glaucoma by eserine: Thus far I can only assert that eserine cures acute glaucoma permanently in exceptional cases; in others, it produces a temporary improvement by which the patient may be beneficially prepared for the operation. In sub-acute glaucoma its effect is doubtful, and in chronic glaucoma, with or without sub-acute exacerbations, the remedy either has no effect at all, or it is injurious. In corneal fistula and slow closure of corneal wounds from intruding vitreous, eserine may be of great assistance. Glaucoma supervening in the second eye during the recovery from an iridectomy of the first was, in the cases that came under my care, not cured by eserine. The tendency to produce iritis, which seems to accompany the myotic effect of the remedy in irritable eyes, and the fact that eserine may cause an acute attack in a case of chronic glaucoma, seem to warn us against the indiscriminate use of this powerful myotic. I shall unhesitatingly begin to treat cases of acute glaucoma with eserine, leeches, aperients and anodynes, as we treat acute iritis with atropine, etc. If the pupil fully contracts, and the attack is completely cured, an operation may, perhaps, never be necessary; but if the remedy produces incomplete myosis and incomplete reduction of tension of the globe, or if relapses occur, iridectomy should not be delayed. In cases of sub-acute and chronic glaucoma, I shall at once resort to iridectomy. Preparatory to iridectomy I would employ eserine only when the eye-ball is extraordinarily hard, the pupil very wide, and the anterior chamber so shallow as to render a smooth performance of the iridectomy difficult, or expose the eye to intra-ocular hæmorrhage in consequence of the sudden reduction of the extra vascular pressure. The prophylactic use of eserine in the healthy eye during the first time after a glaucoma operation on the other may be good practice.

BLINDNESS FOLLOWING DENTAL DISEASE.—Sirletti *(Le Movement Med., Phil. Med. Times)* reports the case of an old man suddenly attacked with hemeralopia, without any previous enfeeblement of vision. On examination, it was found that the patient had suffered severe pain in the upper canines, from one of which the crown was gone. A fistulous cavity with intra and extra alveolar periostitis was found in the root of each canine. These teeth having been extracted, the patient began to be able to distinguish light from darkness almost immediately, and by the end of six days his sight was completely restored.

Obstetrics.

EFFECTS OF FORCEPS DELIVERY ON THE INFANT.—J. G. Swayne, M. D., (*British Medical Journal*, Sept. 28th, 1878,) says that he has not been able to believe from his own experience and from comparing his own statistics with those of other practitioners, that the use of the forceps is conducive to the safety of the brain and preservation of the child's life. He rather concludes from his own experience that Dr. Galabin, whose article in the *Obstetric Journal* for December, 1877, was eagerly read, was more nearly right when he wrote that "it has not been shown that the majority or any considerable portion of the still-births which now occur in Great Britain would be preventable by a more timely use of the forceps."

Dr. Swayne has used the forceps in one hundred and sixty-three cases of labor. In ten of these the forceps was used on account of some complication which rendered speedy delivery necessary. In the remaining one hundred and fifty-three cases the forceps was used to terminate difficult labors, either on account of uterine inability or slight contractions of the pelvis.

Of these one hundred and fifty-three cases, ninety-two were consultation cases and the remaining sixty-one cases were his own. The infant mortality in these cases was twenty-three cases in all, but six of which were found among the consultation cases. An analysis of these twenty-three deaths shows that the infant in seventeen cases died from too much pressure on the head. In thirteen of the seventeen the fœtus was dead when delivered. Some of these deaths are clearly traceable to the use of ergot before the application of the forceps, but several of the cases were due to lacerations of the integument and indentations of the cranial bones. [These accidents *need* not often happen.—Ed.]

In the remaining four of the seventeen the infants lived a longer or shorter time, but eventually died from the injuries then received. Four of the twenty-three deaths were caused by the compression of the umbilical cord by the forceps. Two of the twenty-three should not be considered as due to any accident of delivery, for they were already putrid.

[The doctor has had a bad lot of forceps cases. We should like to know what forceps he uses.—Ed.]

Extra Uterine Pregnancy—Peculiar Case.—Dr. Munde (*N. Y. Med. Jour.*, Dec., '78,) reports the following: He was called to see a woman who supposed herself pregnant and exhibited all the signs of pregnancy. Three years previously she had had a child. On examination, the left side of the pelvis was filled with a tumor which appeared to fluctuate. On the right side was a tumor which appeared like the fundus of the uterus. The os was soft. He could not make out whether it was a single or double uterus or a tubal pregnancy. He had been summoned on account of profuse hæmorrhage. On re-examination he concluded that normal pregnancy did not exist, so he passed the uterine sound and decided that the uterus was empty.

After arranging for an operation on the tumor on the left side on the following day, he left.

Next morning he was telegraphed for, but ere he could reach the patient a baby was born. After delivery the tumor on the left side had disappeared.

In view of all the facts he was inclined to regard the case as one of tubo-interstitial pregnancy.

The fœtus was a male and measured three inches from vertex to extremity of nates. The cord was ten inches long and the placenta about two and one-half inches in diameter.

POTASSIUM BROMIDE IN PUERPERAL ECLAMPSIA.—(*Lyon Medical*, Nov. 17, 1878). Dr. Dumolard has had such success in treating ten cases of puerperal eclampsia with potassium bromide that he places it at the head of the list of remedies in opposing this disease. Its action is so certain that he does not hesitate to formulate the following: Potassium bromide, given and *absorbed* in a sufficiently large dose (five grams), immediately arrests the convulsion and assures the cure of the malady. He gives from sixty to ninety grains of the bromide, dissolved in water or orange syrup, in one dose, and in one-half to three-quarters of an hour after, the convulsions cease. But as he well remarks, this disease is not over with when the latter are arrested, for after the convulsions come the comatose and delirious stages. Now, the bromide has no direct effect upon the latter periods, and they belong in such a degree to the very nature of the disease, that although the convulsions may be arrested before coma has appeared, this will come on, notwithstanding the cessation of the former, and will shortly disappear.

SUBERINE IN EXCORIATED NIPPLES.—(*Lyon Medical*, Nov. 17, 1878). The treatment advised by Dr. Brochard for sore and excoriated nipples is so simple that it deserves publicity:

"As soon as an excoriation or a crack, no matter how small, appears upon the breast of a nursing woman, the nipple and areola should be washed with *pure water*, and after drying, powdered with *suberine*, or impalpable powder of cork. Suberine, which I always use for infants, is far preferable to lycopodium,

is an inert powder, because it contains tannin and is exceedingly cheap, an important consideration with many mothers. After applying the powder, the nipple is covered with a piece of gold-beater's skin, cut star-shaped, and pierced in the centre with several holes made with a very fine needle.

"Whenever the child is to be put to the breast, the suberine should be washed off with water, and the gold-beater's skin placed over the nipple, thus allowing the baby to suck without causing pain to the nurse. After the infant has finished its meal, the nipple is again washed, powdered and covered."

Pathology.

MEMBRANOUS LARYNGITIS FROM EAU DE COLOGNE.—Mr. T. W. Reid, *(Brit. Med. Journal,* Dec. 28, 1878,) reports the case of a lady, aged 27, of excellent constitution and perfect health, who during a faint received some eau de cologne into her nasal passage, pharynx, larynx and trachea. On the second day two small ulcers appeared on the pharynx and a small piece of membrane was coughed up. Within ninety-two hours a perfect cast of the larynx, trachea and left bronchus was brought up in one piece with instant relief of all urgent symptoms. Patches of membrane remained on the nasal mucous membrane till the end of the seventh day. The temperature varied from 99.4° to 97.4°; the pulse from 130° to 88°. No albumen appeared in the urine. There was no scarlatinal or diphtheritic poison.

PROGRESSIVE MUSCULAR ATROPHY—ITS PATHOLOGY.—The researches of Charcot, Hazem and others have been quite generally accepted as demonstrating the dependence of progressive muscular atrophy upon degeneration of the nerve cells of the anterior spinal horns. Friedreich protested against this view, and to his aid now comes Prof. Lichtheim. He publishes a case *(Archiv für Psychiatrie, British Med. Jour.,* Dec. 28, 1878,) in which the necropsy was made by Prof. Poleuheim and no lesion was found in either nerves or cord. The muscles presented the usual appearances of the disease. The case presented the accepted characteristics of the disease in question, viz., the absence of true paralysis, individual atrophy of the muscles and the absence of the degenerative reaction to the electric current. Thus, one case typical in its clinical phenomena is separated from the accepted anatomical basis. The reliability of the persons making these observations must compel a reconsideration of the entire matter.

Physiological Action of Medicines.

LEAD ACETATE: ITS ACTION ON THE BILE SECRETION.—Dr. W. Rutherford has been experimenting with the above remedy upon the dog. His results (*British Medical Journal*, Dec. 28, 1878,) are as follows: In large doses it has a depressant action on the secretion of bile. The obstinate constipation observed in cases of lead poisoning may to some extent be owing to the depressant action of lead upon the liver; but it is probably chiefly owing to a depressant action on the intestinal glands. From the astringent effect of a dose of from one to four grains in diarrhœa it seems highly probable that it affects the intestinal canal much more than the liver. It is a remarkable fact that of all the substances employed in our researches, lead acetate is the only one which depresses the action of the liver without producing purgation. It seems to be a direct hepatic depressant.

AMMONIUM PHOSPHATE: ITS ACTION ON THE LIVER.—Rutherford, by the same experimentation, found ammonium phosphate to be a hepatic stimulant that produces powerful effects.

ATROPIA: ITS ACTION ON THE LIVER.—The same observer found that atropia does not paralyze the hepatic cells, neither does it appear to excite them. Whether or not it possesses the power of paralyzing the hepatic secretory nerves is doubtful; but seeing that it antagonizes the effect of physostigma on the liver, and remembering the action of these substances on the nerves of the heart and salivary glands, the suspicion is entertainable that physostigma stimulates the hepatic cells through a nervous apparatus that is affected in an opposite sense by atropia; while the hepatic cells, and perhaps some nervous mechanism like the motor ganglia of the heart, in close relation to them, are unaffected by atropia.

SALIVARY SECRETIONS AS MODIFIED BY PILOCARPIN AND ATROPIA.—Mr. J. N. Langley (*Journal of Physiology*) reports an extensive experimental study of the relation of atropia and pilocarpin to the salivary secretion. He finds: That pilocarpin in proportion to the quantity given paralyzes the secretory fibres of both the chorda tympani and sympathetic nerves. The diminution of the secretion caused by pilocarpin after stimulation of the sympathetic is a direct effect of the diminished blood supply, and not of nerve fibres inhibitory to the secretion. The slight increase of saliva obtained by stimulating the chorda tympani after a large dose of pilocarpin is due to the action of its vaso-dilator fibres, and not to the action of its secretory fibres. In regard to the secretion of the gland, atropin and pilocarpin have an imperfect mutual antagonism; as long as pilocarpin produces a secretion, the antagonism of atropin is perfect; the antagonism of pilocarpin for atropin is more nearly perfect the less the quantity of atropin. With regard to the secretory nerve fibres, there is but an imperfect, one-sided antagonism, that is of pilocarpin for atropin.

Therapeuti

VOMITING TREATED BY THE TINCTURE OF WALNUTS.—Dr. E. Mackey (*The Practitioner*, Dec., 1878,) recommends tincture of walnut highly in the treatment of vomiting. It is made according to the following formulæ:

Fresh walnuts, 30 oz.
Spirit of wine (rect.) 12 oz.
Water, q. s.
Distil sixteen fluid ounces.

The dose used is a teaspoonful, given every one to four hours in a little water. A quick and marked effect is reported in vomiting from pregnancy, dyspepsia, hysteria, and even cerebral vomiting.

Public Health.

SEWERAGE OF ANCIENT ROME.—Dr. Essie, C. G., *(Sanitary Record*, Dec. 27, 1878,) reports the results of some investigations into the sewerage of ancient Rome. The main sewer was composed of three semi-circular arches enclosing one another. These concentric rows of enormous stones are piled above each other and fitted in place without mortar or cement. The average width of the sewer is twelve feet innermost diameter, and the average height about thirty-two feet. It was constructed of peperino blocks, some of which are over five feet long and three feet thick.

It was built about seven centuries before Christ and intended to drain the lake that surrounded the hill upon which the city was built and the contiguous marshes, thus permitting the Romans to have free intercourse with the Sabine town on the hill across the lake. As the city extended, new sewers were built connecting distant points with the great sewer. These sewers conveyed to the Tiber the storm waters from the hills, the overflow of the springs and marshes, and the overflow of water brought to the city by the stupendous aqueducts; they removed the wastes from the public fountains, the flow from the streets, the fish reservoirs, the wastes from the magnificent baths and the slops from the houses. It is probable that they began to be used as sewerage about four centuries B. C. When it is remembered that in the time of the emperor Augustus the city contained over two millions of people, it will be seen that in no other way could the city be kept in a tolerable condition of cleanliness.

As a huge landmark in the path of progress the cloaca maxima still remains. Estimated not only by its vastness but by its purpose, it transcends in magnitude the pyramids or the great wall of China.

Small Pox Epidemic in Chicago in 1877.—J. Suydam Knox, M. D., Ass't Commissioner of Health, Chicago, 1877, (*Chicago Medical Journal and Examiner*, Nov. 1878,) recently submitted the following propositions to the Chicago Medical Society:

1st. Small-pox cannot become a serious epidemic in any city where vaccination and isolation are compulsory and thoroughly accomplished.

2d. Removal to hospital is to the advantage of the patient.

3d. Adults vaccinated only in infancy contract modified small-pox (varioloid) almost as readily as non-vaccinated children contract small-pox.

4th. Recent successful vaccination is an absolute protection against small-pox in any form.

5th. Successful vaccination done during the course of the disease modifies small-pox.

These several propositions are fully proved by reference to the statistics of the epidemic of small-pox in 1877, in Chicago. Although the circumstances favored the spread of small-pox in Chicago at that time, yet but 154 cases in all occurred in that city of 500,000 inhabitants. Of these 154 cases, 116 were removed to the hospital, of which 22.4 per cent. died; 38 were quarantined at home, of which 45 per cent. died.

Among adults vaccinated in infancy only, there were 76 cases and 4 deaths; among children never vaccinated, 78 cases and 34 deaths. Average age of adults, 24 years; average age of children, 4½ years.

Infant vaccination without re-vaccination exerts but little influence in staying the spread of small-pox, but greatly diminishes its mortality.

Accompanying the 116 cases sent to the hospital were 98 relatives who made an average stay in the building of about three weeks. They were all successfully vaccinated before admission and not a single one contracted small-pox. The families of the 38 patients left at home were also all vaccinated and were rigidly quarantined with the sick, yet not a case of small-pox occurred among them.

In no instance under observation did small-pox develop itself where primary vaccination had been successful within three years or where re-vaccination had been successful once.

The last proposition is supported by five reported cases of children vaccinated after infection with small-pox. All recovered.

VACCINATION AND RE-VACCINATION.—A committee from the King's County Medical Society has been re-studying this subject, with the following results (Transactions, Feb., 1879): (1) Vaccination is the only means of preventing small-pox. (2) Vaccination ought, in ordinary cases, to be done not later than the third month. (3) Vaccination does not endanger the health of the child; the mortality is forty-five times less during the three weeks that follow vaccination. (4) There is no protection for adults without re-vaccination. (5) Re-vaccinations should be done about the tenth year, not later than the fifteenth. (6) Vaccinations and re-vaccinations should be made regularly, and recorded as regularly as births, with State and date of inspection. (7) Brooklyn should have a small-pox hospital centrally located, to avoid unnecessary exposure of patients. (8) An hospital centrally located would be entirely safe for those living in the vicinity. (9) The number of patients does not increase the danger, and the mortality is less than in private practice. (10) Each patient should be brought separately to the hospital, and without delay.

With these conclusions the committee recommended that: *Whereas*, no city which has a large unvaccinated population is ever safe against the ravages of an epidemic of small-pox; and, *Whereas*, the medical profession are greatly interested in the prevention and final extinction of that disease; therefore be it *Resolved*, That the Board of Health should be constant in reminding the authorities that motives of economy and of humanity render necessary a permanent vaccination fund as well as an infectious disease hospital within the city limits. II. *Resolved*, That this society urge upon the common council that a constant vaccination service fund be maintained from year to year, in the belief that every appropriation made for this service will be returned ten-fold to the treasury by preventing the enormous expenditures incident to every small-pox epidemic. III. *Resolved*, That the Board of Education be urged to consult with the Board of Health in regard to the admission of children to the public schools who are not able to show evidence of efficient protection by vaccination, or by a previous attack of small-pox.

This study is just as valuable to all large towns and cities as to Brooklyn.

Chemistry and Pharmacy.

PLANTS USED MEDICINALLY BY THE INDIANS OF THE UNITED STATES.—From an interesting article by Dr. Edward Palmer, published in the *American Journal of Pharmacy*, Nov. and Dec., 1878, we glean the following facts in regard to the Indian Materia Medica:

Chlorogalum Pomeridianum, common soap root of California, the amole of the Indians and Mexicans, largely employed as a substitute for soap, has decided medicinal properties.

Datura Meteloides, Jamestown weed, stramonium, is used by the California Indians as a narcotic, in the form of a decoction of the root. It is also given to dancing girls as a stimulant. The Pah-Utes bruise the seeds, soak them in water, and expose the mixture to the sun's rays to cause fermentation. The resulting preparation is employed as a narcotic, the alcohol produced in the fermentation adding to its effect.

Ligusticum Apiifolium, angelica of the settlers in Utah, pah net-snap of the Pah-Utes, is a favorite medicine with these Indians. The root is bruised and used as a poultice for sprains and bruises. A tea is made from the roots and taken internally for pain in the stomach. It is used also as a prophylactic against contagious diseases; for this purpose the nostrils are filled with pieces of the root.

Berberis Aquifolium, Oregon grape, is used in the form of a decoction or tincture of the root as a tonic, having the virtues usually attributed to sarsaparilla.

Anemopsis Californica, yerba mansa of the Mexicans, with its strong, peppery taste and odor, and powerful astringent qualities, is a popular vulnerary remedy among the Indians of Arizona, Sonora and Southern California. The root is used in the form of powder, or in a decoction, as an application to venereal ulcers, as well as to ordinary cuts and sores. The leaves, wilted by heat, are applied to swellings and regarded as a certain cure.

Achillea Millefolium, common yarrow, is used by the Pah-Utes in the form of a tea for weak and disordered stomachs. It is also much used by the whites in the form of bitters.

Cucurbita Perennis, the Chili cojote of the Mexicans. The roots of this plant, which are large and long, are macerated in water and used as an application to piles. The pulp of the green fruit is used, with a little soap, for removing stains from clothing. The seeds, ground fine and made into mush, are used as food by the Indians of Arizona and Southern California.

Euphorbia Polycarpa, called by Mexicans golendrina, in the form of a strong decoction, is the great remedy for snake bites in Arizona and Southern California. Dr. Palmer had himself employed it with satisfactory results for relief from the suffering occasioned by the sting of a ray-fish (stingaree).

Eriodyction Glutinosum, yerba santa of the Mexicans, is one of the most important remedies of the Indian materia medica. A decoction is used both externally and internally for rheumatism and partial paralysis. For affections of the lungs the dried leaves are sometimes chewed or smoked, or they are employed in decoction.

Micromeria Douglasii, yerba buena of the Mexicans, is an herb growing near the sea coast of California, and having a strong minty smell. It is used by the Indians in the form of a decoction for colds and fevers, and the plant is bound around the head for the relief of headache.

Artemisia Tridentata, commonly called sage brush, yields a volatile oil which seems to be associated with the stimulating properties of the plant. A decoction is used by the Pah-Utes for colds, headaches, and for worms.

Artemisia Filifolia, southern wood, also yields a volatile oil which is good for liniments; the Indians use a decoction as an application to swellings and bruises.

Artemesia Ludoviciana is used by the Pah-Utes as a parturifacient, when such a thing is required, which with them is seldom. In hemorrhage from the nose, they stuff the nostrils with wads of the fresh plant. The seeds of the same plant, as well as those of an allied species, Adracunculoides, are used also as a food, being ground and made into a mush, a dish not at all tempting to the unaccustomed palate.

Oreodaphne Californica, a fine evergreen tree of California, having a strong, spicy odor. If the leaves are rubbed on the face and hands, a distressing headache is produced. The Indians understood enough of the Hahnemannian doctrine of *similia, similibus* to employ the plant in the cure of headaches.

Erythræa Venusta is employed in Arizona and Southern California to cure ague, and is said to be an efficient substitute for quinine.

Peonia Brownii, called by the Mexicans peo-neo, produces a mealy root, with a taste resembling licorice. This is powdered and used in substance, or in the form of a decoction, for colds, sore throats, and for pains in the chest.

Grindelia Squarrosa is also a remedy for colds.

Lygodesmia Spinosa produces in the axils of the rootlets a short, fine, silky substance used by the Digger Indians as a hæmostatic.

Perezia Arizonica produces a similar substance, used in a similar manner by the Apaches.

Glycyrrhiza Lepidota, called in Utah desert root, resembling common licorice in taste, is used as a tonic by the Pah-Ute Indians. Whites sometimes chew the root as a substitute for tobacco.

Ephedra Antisyphilitica, teamsters' tea, enjoys a high reputation as a remedy in venereal diseases. It is a strong astringent and may prove to be a really valuable medicine.

A NEW, CHEAP AND CONTINUOUS DISINFECTANT.—(*Alger Medical*, Nov., 1878). Dr. John Day, of Gelong, Australia, recommends for civil and military hospitals, and for the destruction of the germs of contagious diseases, a disinfectant composed of one part of rectified spirits of turpentine and seven parts of benzine, to each ounce of which five drops of essence of verbena have been added. The purifying and disinfecting properties are due to the presumed power of each of these ingredients to absorb oxygen from the atmosphere, and to convert it either into peroxide of hydrogen or ozone.

Clothing, furniture, papers, books, etc., can be saturated with the mixture without suffering detriment, and its action persists for an almost indefinite time, whether the disinfectant has been applied to a porous surface or not. This may be proved by pouring upon any disinfected object a few drops of a solution of potassium iodide; the peroxide of hydrogen, which is being continually produced, frees the iodine and gives rise to dark brown spots.

The disinfectant may be applied with a sponge, or a brush; where it is possible, the object should be immersed in the liquid and then allowed to dry.—*Lyon Medical*, Nov. 17, 1878.

Oleate of Zinc.—Dr. H. R. Crocker, in a recent number of the *British Medical Journal*, reports very favorably on the use of oleate of zinc in eczema. It is said to be especially useful in the discharging stage of both the acute and chronic forms of the disease. The following is the process employed in its preparation: one ounce by weight of oxide of zinc is stirred with eight fluid ounces of oleic acid, made as free as possible from palmitic acid. The mixture is allowed to stand two hours, and is then heated until the oxide is dissolved. On cooling it forms a yellowish white hard mass. It may be mixed with lard or simple ointment, for use, but vaseline is preferable, as the ointment is less liable to become rancid.

An Elastic Pencil of lunar caustic is prepared by Dr. Pajot by dipping a laminaria tent, two millimetres in diameter, into tolerably thick mucilage, and then rolling it in finely-powdered nitrate of silver. After drying, an elastic pencil the size of the ordinary stick remains, which may be readily introduced into the uterine or other cavity without fear of fracture.

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Original Communications.

The Therapeutic Value of Ergot.

BY J. W. COMPTON, M. D.

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To the earnest physician, studiously engaged in the promotion of science and the rational application of remedies to the cure of disease, there is a pleasant satisfaction in being able to announce, that as medical men, we live in an age of progress and investigation, when the well balanced mind of the medical practitioner is unwilling to receive the *ipse dixit* of others without first submitting their propositions to the crucible of science or at least to the analogical tests of reason and common sense; that practitioners are no longer led by the invisible fingers of superstition to administer remedies recommended alone by the blind followers of tradition.

It is also gratifying to be able to announce that our medical journals and medical societies of to-day are disseminating among the ranks of the profession, the latest discoveries both in appliances and remedies, the result of practical experience and clinical investigation. It is through the medium of investigation and the untiring research it may be in some cases of a life-time, by men of master minds educated in all the collateral branches in the vast field of science, that the profession of medicine is to come in possession of such information as will enable the practicing physician to secure a knowledge of all the valuable uses to which remedies new and old may be applicable.

In discussing the therapeutic value of ergot, it is not necessary that I should enter into any detailed history of this valuable remedy; and it will be sufficient to call attention in passing to the potency of the remedy under consideration, and that a parasitic fungus character is attached to the grain from the very beginning of its development, which imparts to it, if given in improper doses, or if continued too long, certain poisonous properties. Ergot has long been used empirically in Europe and on the continent by midwives in parturition. It was first brought to the notice of the profession of the United States in 1807 by Dr. Stearns, of Saratoga, New York. The periodicals of that day teemed with laudations of its efficacy in facilitating parturition. They did not appear to know that it possessed any other therapeutic value than that of producing uterine contractions and hastening delivery. They did not enlighten the profession in regard to the indications or contra indications for its administration, except to use it when labor was tardy and protracted.

During the intervening time up to the present, practitioners reasoning from its physiological action and from repeated clinical experiments have discovered that the remedy may be advantageously employed in a large number of diseases, and many have become enthusiasts on the subject of the therapeutic value of ergot.

The principal diseases and diseased conditions in which it may be employed with advantage, and in which its administration is indicated by reason of its known physiological action, may be enumerated: hemorrhages from the uterus, lungs, stomach, nose, bowels, bladder, in a word all classes of passive hemorrhages. In purpura hemorrhagica, writers have attested its marked efficacy, and so far as I have had opportunity of testing its controlling influence over the blood vessels in this disease, I have found its administration to result in well marked benefit.

By injecting this remedy into the varicose veins, it is claimed for it, that it contracts the veins and proves to be an excellent remedy. Hemorrhoids belong to this class and good cures may result from its use.

Administered in the intractable vomiting of pregnancy it will arrest or so diminish the secretions as to greatly relieve and even cure the disease. There are few physicians who have practiced medicine any considerable length of time, who have not more or less often been under the necessity of exhausting the entire catalogue of remedies, whilst their anxious patients were well nigh exhausted from the incorrigible vomiting of pregnancy. Dr. Smith, at that time vice-president of the Tri-State Medical Society, read a very interesting paper before the society in 1876 on this exceedingly troublesome disease. I can only give the substantial points in this paper from memory, as it has I believe, never been published.

His patient, in the case reported, was afflicted with the vomiting of pregnancy in its most distressing form.

He employed successively all the remedies at hand or of which he could learn, without being able to control the terrible disease. He called in counsel to no better purpose. His patient became so reduced that her life was despaired of. With the consulting physicians in attendance with him at this critical time, it was decided that to produce abortion gave his patient the only remaining chance for her life; but before assuming so grave a responsibility, he decided to consult an old physician some distance away.

A letter was sent describing the alarming condition of his patient, that the doctor might be stimulated to lose no time unnecessarily in reaching the bedside of the almost dying patient. The doctor was too sick to leave home, but as the letter explained the conditions and that the last consultation resulted in an agreement to produce abortion, he advised them to do so without hesitation. Thus fortified, as soon as the messenger returned arrangements were made to carry this into effect. The remedy was at hand and to make sure work a large portion of a strong decoction of ergot was administered to the patient, but instead of producing labor pains, it arrested the vomiting, the patient took a good refreshing sleep, awoke with a desire for food, went on to the full term and gave birth to a healthy living child.

This accidental discovery of the specific effect of ergot in the vomiting of pregnancy, induced Dr. Smith and all the physicians who became acquainted with this case, to adopt it as the remedy in this disease, and they declare they have never been disappointed in its good effects. I have treated some cases of heamaturia with unmistakably good results. The remedy appears to exert its good effects in this disease as it does in many others, by contracting and lessening the calibre of the veins and arteries through its peculiar power of contracting muscular fibre, and in this manner arrests hemorrhage. It also arrests profuse perspiration by contracting the capillaries, and the same good office may be realized on all undue secretions and secreting canals.

In treatment of tumors of the uterus, its contracting power over the muscles of the organ forces the tumor down, and facilitates its removal. As in these cases there is nearly always hemorrhage, the remedy is of signal service as a hemostatic.

In chronic sub-acute metritis it lessens the vascularity of the organ by contracting the blood vessels, and by inducing a state of tonic contraction aids in securing a healthy tone of the organ.

In leucorrhœa and profuse menstruation associated together it fulfills all the indications, and will be found an excellent remedy.

In that sad and disgusting infirmity, incontinence of urine, where the contractility of the bladder has been impaired by relaxation of its coats, or from immoderate distention, we possess in ergot, when systematically administered, a remedy peculiarly adapted to the contraction of the muscular fibres, and so giving tone to the coats of the organ as to cure vesical paralysis, upon which this disease usually depends.

Where cases of hematemesis have resisted the usual remedies, such as lead, opium and sulphuric acid, ergot has been reported successful, with no more vomiting of blood after the second dose. Its internal administration in cases of this kind is recommended by the fact that it is neither a stimulant nor an excitant.

The well established power possessed by ergot over the circular muscular fibres has suggested the use of this remedy in pneumonia, and the results have been most satisfactory, "in some cases creating quite an enthusiasm in its favor; the temperature was reduced, dyspnœa less troublesome, sputum containing less blood, cough much less painful and less frequent; indeed, marked improvement in all the symptoms." It has recently been claimed for it that it possesses the power of aborting pneumonia.

In gonorrhœa and gleet and in spermatorrhœa, good results are claimed to have been secured from the administration of the remedy.

In view of its physiological action we may expect good results in diarrhœa, particularly where dysenteric symptoms are found. It will exert a good influence over derangements of the heart, especially where the cardiac action is enfeebled.

Ergot meets all the indications in the treatment of whooping cough by arresting undue secretion, and contracting overdistended blood-vessels. The same power gives to it a prominence in the treatment of enlargement of the spleen.

Its physiological control over the blood-vessels of the spinal cord and brain, gives this remedy a specific influence over their congestions and inflammations and in the delirium of low congestive forms of fever. In the hospitals of Europe they are now treating severe cases of typhoid fever with the remedy in question.

I shall condense the statement of the first of a number of cases reported from the Hospital Lariboisiere, admitted on 12th day of the disease. The tongue was very dry and brown, the gums were covered with sordes, speech was difficult, and the ideas confused. At night there was constant delirium, with subsultus and other nervous phenomena, great pain in the back of the neck, opisthotonos at times, and symptoms like meningitis. The next day the abdomen was retracted and signs of collapse seemed to portend an early death. Thirty grains of ergot given during the day. On the following morning there was a considerable modification of all the grave symptoms. The muscular twitchings had ceased, the abdomen less drawn in, and the general condition improved. The ergot was continued three days, after which time indications of danger had entirely disappeared, and the fever ran its course with moderate severity.

As a reliable and indispensable remedy in uterine hemorrhages it has no equal; and in inertia of the uterus for increasing both the force and frequency of the contractions and the expulsive power of the uterus in parturition, its efficacy and value are well understood and freely admitted by the profession. So much has recently been written attesting the therapeutic value of ergot, that it will prove both a subject of interest and profit to all who will undertake its perusal.

Dr. John L. Cook claimed that ergot was a remedy of much value in the treatment of yellow fever, especially in the hemorrhagic forms of that disease. That its administration would be indicated in all acute inflammations in the congestive stages, before exudation, as it diminishes heat by reducing the capacity of the capillary circulation, and by contracting the blood-vessels would greatly tend to arrest undue secretion and hemorrhage, which is found to be a troublesome characteristic in this class of diseases.

Allen's Method in Dislocations of the Hip—Another Case.

BY A. F. KINNE, M. D.

Since Bigelow's monograph "upon the mechanism of the hip joint" was written, there would seem to be rational ground for the hope, that the old method of reducing dislocations of that joint by extension and counter-extension in the line of the patient's body, will be finally laid aside.

But the new method by manipulation, has not, perhaps, been carried to perfection even now. There would seem to be room for a simplification of it, at least.

In the Ohio *Medical and Surgical Journal*, for October, 1877, there is a report of four or five cases in point, made by Dr. S. J. Allen, of White River Junction, Vermont, who seems to have hit upon the method in question, as long ago as 1841. All Dr. Allen's cases were dislocations upon the dorsum illii. The one which I wish to report here was a displacement into the ischiatic notch, showing, as far as it goes, that the new method is as well adapted to a lodgment of the bone below the tendon of the obturator internus, as above it. But before I proceed to do so, I will insert here, in Dr. Allen's own words, the substance of his very simple procedure, for the benefit of such readers as may not have seen the report. I quote from his second case, page 387.

"After the patient was fully chloroformed, the muscles being thoroughly relaxed, I stepped upon the bed, flexed the leg upon the thigh and the thigh at right angles with the body, and, placing his foot between my legs and my hand beneath the bend of his knee, I lifted the hips well from the bed, and held them immovably in that position less than half a minute, when the head of the thigh bone returned into the socket with a sensible and audible shock."

I was called, August 21, 1878, to see Johnnie M., nearly five years of age, who had been run over by a two horse wagon loaded with straw. Found him lying upon a bed, where they had placed him, and, both legs being well flexed upon the body, it was plain at a glance, that the left femur was shorter than its fellow by more than an inch. And a peculiar "knuckle," a little above the middle of its shaft, revealed the existence of a fracture of the shortened thigh at that point.

Was the shortening due to this fracture? A moment's examination showed that it was not. And upon taking hold of the upper fragment, I found that the limb could be neither extended, rotated nor abducted. Its axis was directed upwards and inwards, diagonally across the front of the body. And it was also inverted—everted, to be exact, for in displacement of the hip backwards, inversion with the limb extended, becomes eversion when it is strongly flexed upon the body.

Here then was not only a fracture but a dislocation also of the same femur. The thigh had been pushed downwards and backwards out of joint, *after* being strongly flexed upon the body, and the head of the bone was probably now lying, not in the ischiatic notch, but upon the sacro-sciatic ligament below it

It is not long since the time, when this complication of a fracture and a dislocation of the same femur, was regarded as the most difficult possible in the surgery of this bone. Sir Astley Cooper, would have first mended the broken bone, and then, if possible, reduced the luxation, after the lapse of four or five weeks.* But all this is happily now changed, and I think it highly probable that in this case, the luxation might have been reduced by manipulation as taught in recent text books. But I had seen Dr. Allen's report, and as the leverage to be gained by flexing the leg upon the thigh, must be lost at the point of fracture, the case seemed to be an especially good one, and a new one, in some respects, in which to make further trial of the new method.

I gave chloroform, therefore, to the point of complete anæsthesia, this, in some cases at least, being an essential prerequisite to the success of this method. Then passing my right hand from within outwards, under the knee of the affected limb, the head of the bone was easily drawn upwards into the sciatic notch; and the displacement was then simply ischiatic, or dorsal below the tendon. The shortening was then nearly gone and the mobility of the joint much improved. Continuing the same procedure, I then carried the thigh to a perpendicular, and, holding the leg in a line parallel with the axis of the body, made gentle extension upwards. In less than half a minute, and before I had used quite force enough to raise the little hips from the bed, the head of the bone began to glide upwards, the pelvis, at the same time, rotating outwards; and, as soon as abduction enough was thus indirectly secured, it rotated into the acetabulum with that peculiar shock, both sensible and audible, which every surgeon so well knows how to appreciate. And thus, before the bystanders knew what was the matter, I had reduced an ischiatic luxation of the hip with one hand.

Of course, it must be admitted, that Dr. Allen's method, when he first began to practice it, was empirical. And so indeed, originally, was the method by manipulation also. But a better understanding of the mechanism of this joint, has shown that both these methods are thoroughly scientific and rational; and that the principles involved in both are essentially the same; the only difference being, that by Dr. Allen's method, abduction is obtained by permitting the pelvis to rotate outwards, away from the thigh, and that eversion of the thigh is secured beforehand, (or inversion corrected) by holding the leg parallel with the axis of the body.

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* Cooper on Dislocations and Fractures. Boston, 1825, p. 398.

Upon taking off the pants in order to dress the fracture, the track of the wheel was very distinct; it did not seem difficult to see also, how the thigh had been both broken and dislocated. The broken thigh showed no marks of external violence, and must have been drawn up out of the way. The right leg being extended, the wheel seems to have passed over the front of the body in the line of the right groin, and just below the scrotum and penis, which were very small and closely retracted. There was a small quantity of feces in the pants and the anus was patulous and bloody, indicative of the pressure to which that part of the body had been subjected. And the surgical lesions would seem to have been caused by the hub or some other part of the passing wheel impinging upon the flexed knee in the direction of the shaft of the femur.

Ypsilanti, Sept. 1878.

DIPHTHERIA.

A PAPER READ BEFORE THE N. E. D. MEDICAL ASSOCIATION,
BY DR. J. S. CAULKINS, THORNVILLE, MICH.

ANDRAL, the celebrated French pathologist, once described the Asiatic cholera in these words: "Cause, unknown; diagnosis, easy; prognosis, unfavorable; treatment, useless." The description applies to the subject of our discussion fully as well as it does to cholera, being really a condensed statement of what is at present known concerning diphtheria, and will serve well as a text for further remark.

THE UNKNOWN CAUSE.

The profession is divided with respect to this, in perhaps, about equal numbers, into two parties, the contagionists and the non-contagionists: the former holding that the disease is caused by a poison which is generated in the bodies of the sick, and communicated by them to the well; the latter, that it is a miasm generated by some occult telluric or atmospheric agencies, in a manner analogous perhaps to the formation of marsh malaria. Concisely stated, the argument stands like this: Contagionists hold their opinion to be very nearly, if not quite demonstrated, because they can so often by careful investigation trace the spread of the disease from person to person, and from house to house, in the same way that they do other diseases in which personal infection is undisputed; Non-contagionists hold to their way of thinking for these two reasons:

1st. Because every now and then the disease erupts in a locality where it has never before been seen, and to which the route and vehicle of its transportation cannot be discovered.

This is, by many, considered an unanswerable argument against the doctrine of contagion, but the least bit of reflection shows us its futility. The difficulty in the case springs from a want of information, which may or may not be attainable by closer examination. It is the same difficulty that would beset an agriculturist if he should find growing on his farm, in a place where he knew that a short time before no such thing was to be seen, some noxious weed, Canada thistle perhaps, or red root. The farmer might not be able to give even a probable guess as to how the plant came to be there, but he is none the less convinced that some seed, root or cutting of it, has been by agencies unknown to him, transported to and dropped at the place where he finds it growing. The logic which requires us to believe in the *de novo* origin of diphtheria because we cannot explain the manner of the transportation of its germs, would require the farmer either to give a strict account of how the weed was planted where he finds it, or else to believe that it sprang spontaneously from the soil, without seed, root or cutting.

It is frequently very difficult in the case of some diseases of unquestioned contagious nature, measles or small pox for instance, to trace the infection to its source, and we are willing enough in such cases to acknowledge our ignorance of the method or means by which the poison is transported, but we persistently refuse to believe in spite of this want of information, that either of these diseases can be caused by anything except a specific poison reproduced in the bodies of the sick.

2d. The argument that diphtheria is not contagious, because the most of those who are exposed to it do not contract the disease, has no more validity than the preceding; and similarly its fallacy is best shown by what happens to the seeds of the weeds. There is no lack of vitality in these, but of their uncounted and countless millions, how few comparatively ever reproduce their kind! The little embryo is there and alive, but something else is needed to mature the plant; there must be a soil and conditions favorable to germination. A small number as compared to the total find these necessary conditions, the rest perish for the want of them. So of the seeds of the diphtheria; few of them vegetate because but few of the exposed present the necessary conditions. The dictum of the non-contagionists would, if applied to the weeds, lead to the *reductio ad absurdum* that weeds never grow from seeds.

The quicker we let the non-contagious theory drop entirely out of focus the better for the profession and the world.

Turning to the consideration of the opposite belief we find contagionists divided into two sects, one party holding like B. W. Richardson, with his glandular theory, that the infection is a chemical poison, and the other that it is a *contagium vivum* or living microscopical fungus that gets entrance into and grows at the expense of the animal fluids. It is not intended to discuss here the relative merits of the two hypotheses, since there are not facts enough upon which to base a certain conclusion. After the discovery by the German pathologists that the diphtheritic membrane was full of micrococci, it was thought by over sanguine people that the question was decided, and that these infusorians were the cause of the disease, but a regard for scientific truth compels us to acknowledge that this probable conjecture is not yet proved. It may be that instead of bearing the relation of cause to the disease, they only bear that of effect, and that the true diphtheritic fungus is too small for observation.

THE EASY DIAGNOSIS.

There is little need of mistaking diphtheria for any other disease. In making out the diagnosis, it is mainly necessary to exclude common non-specific pharyngitis, anginose scarlet fever and quinsy: from these and all other diseases, it can be, after it is fairly established, diagnosticated in the dark and without asking questions, if the diagnosticator has the sense of smell properly developed and educated. Some others of the zymotic diseases have bad smells that are peculiar and distinctive, but none to so marked an extent as diphtheria. The offensive effluvium is *sui generis* and pathognomonic of the disease; whenever it is present no matter how anomalous the other symptoms may be (and they are sometimes very anomalous) the complaint is diphtheria. There may be a rash on the skin and albuminous urine, but if the characteristic effluvium is there, the disease is not scarlet fever but diphtheria; on the other hand, there may be no rash on the skin, and the throat may be lined with an ashy grey membrane, but if the effluvium is not there, the disease is not diphtheria whatever it may be, either anginose scarlet fever or common pharyngitis. There may be, again, very little membrane to be seen in the red and inflamed throat, but if the effluvium is there, the disease is not quinsy but diphtheria. Quinsy has been sometimes mistaken for the latter, since it is attended with even more swelling of the tonsils, frequently with an aphthous growth and bad smell to the breath, which is, however, a different smell from that of diphtheria, and ought not, to an educated nose, to lead to liability to mistake. The prominence given to this diagnostic symptom precludes the necessity of considering at any length the rest—the chill, fever, headache, wandering pains, swelled throat lined with the false membrane, the altered voice, being none of them exactly pathognomonic—the peculiar wandering pains making the nearest approach to it. Among the sequelæ, one, the paralysis may be considered nearly if not quite diagnostic.

THE UNFAVORABLE PROGNOSIS.

In the whole loathsome catalogue of diseases by which poor humanity is afflicted, there are but few of the "shapes abhorred" that are more to be dreaded than diphtheria. There is none, except small-pox and erysipelas, more repulsive to the senses, and none, not even yellow fever and cholera, show a higher death rate. When, about twenty years ago, it came creeping toward us from the east, it was under a form of intense malignancy, but after the first violence of its attack was spent, it seemed to undergo a favorable modification, and for several years to do but little harm ; the public attention not being strongly directed to it, and very few notices of its ravages appearing in the press. Of late it seems to have undergone another revolution, and reverted to its original condition of malignancy, if not to a worse one, so that we hardly take up a paper without reading the record of its havoc in some part of our own or of other countries.

That diphtheria is on the increase cannot be doubted. The last registration report for the State of Michigan, which is yet compiled, is for the year 1872, according to which, the number of deaths from diphtheria during that year was 192, exactly the same number caused by measles.

In exhibit 11, showing the fifteen principal causes of death, it does not have a place. Taking the mortality from the disease in Lapeer county as the basis of the total for the State, this will be shown, when 1878 comes to be compiled, to be for that year not less than 500, placing it third on the list of principal causes of death.

It is a favorable feature of diphtheria epidemics that they are more local and seem to die out more suddenly than most other contagious diseases. If this were not so, and the disease spread from one locality to another, instead of making the unaccountable short stops that it does, diphtheria would head the list of principal causes of death.

THE USELESS TREATMENT.

We cannot cure diphtheria. Like the rest of its congeners, small-pox, measles, scarlet fever, etc., it has its course to run, which it does uninfluenced as to duration by any appliances, external or internal, with which we are acquainted. We know of no means, after the poison has been received into the system, by which it can be destroyed and the disease aborted. The cure for diphtheria is yet to be discovered, and whoever discovers it, let his statue be built alongside that of Jenner, and be inferior only to his in height. Will the remedy, when found, be a prophylactic like vaccination in small-pox, or a specific like quinia in ague? The equally unavailing plans of treatment that have been recommended and tried for the relief of the disease, are too numerous to pass in review here. The efforts of some practitioners are mainly directed toward the throat symptoms, believing that the malady has a local origin there ; that the infection of the system is secondary to it, and caused by the absorption of septic products. Holding this view, they apply caustics to the throat to destroy and remove the false membrane, hoping, thereby, to arrest the progress of the complaint.

Others believe that the disease is constitutional in its inception, the throat symptoms being its local manifestation, and consequently, do not see any good in cauterising the throat. It is important that as soon as possible, this disputed point should be settled, for if the local origin theory be true, we ought to be able, by an early and vigorous use of disinfectants, to prevent the later general infection. At present, the evidence seems decidedly against the doctrine of local origin, but that does not necessarily invalidate the use of local applications to the throat ail. It is true, that if the throat trouble is a symptom of the constitutional disease, we cannot cure that disease by appliances to the throat trouble, since the internal malady could not thereby be influenced ; but still, to the pertinent inquiry : "Why, then, use them?" we can give an answer that is probably rational in favor of the practice. The diphtheritic membrane is a parasitic growth, and in its contiguity to the laryngeal opening lies one of the principal sources of danger—the danger of the closing of that orifice by the parasitic mass. If we can find a germicide or cellicide that will kill the vegetation as fast as it sprouts, we may save the larynx from invasion and the patient from death by croup, in a case where nature is capable of carrying him past the remaining dangers of the malady. Sulphur is a remedy highly recommended from several quarters to fill this indication. It is to be used by sufflation. Permanganate of potash is another good application for this purpose. Evidence collected during the recent fatal epidemic in Paris goes to prove that the chlorate, although an old remedy, is the best yet.

What about counter irritants ; is their use to be advised or deprecated? There is a wide discrepancy of opinion on this point, and there are not really facts enough on which to base a decision. It is possible that they may afford some relief in cases where interstitial effusion exists. The idea that they can control the course of the disease is too preposterous to be discussed.

If any revulsion is to be recommended, vesicants, like flies or croton oil, that cause deep congestion of the parts below, had better not be tried ; but something that works no deeper than the skin. Such an application is a flannel rag wet with kerosene, and worn till the skin breaks out into pimples.

The great and important thing in the treatment of diphtheria, if the theory of constitutional origin be true, is to find the constitutional remedy ; something that will follow the poison of the disease into the animal fluids, and neutralize or kill it there, as the salts of quinia do the poison of marsh malaria. Why should we not try sulphur, especially such of us as hold to the germ theory, since it is such an effective germicide ?

With this intention, it should be given as early as possible› and as fast and in as great quantity as the stomach and bowels would tolerate. The writer, impressed with the fact that there must exist in the atmosphere some disinfectant that soon destroys the virus of every contagious disease, has, in common with others, thought that this agent was the ozone. It may be that this opinion is erroneous, and that it is the sulphurous acid that does the work.

Sulphur very soon permeates the whole system, after being taken into the stomach, as may be proved by observing how a silver coin in the pocket is blackened by the insensible perspiration during its internal use. It may be worth our while, if we unhappily meet a malignant epidemic, to try sulphur. It can do no harm, and may do good. Another thing that we had better try in such circumstances, is the permanganate of potash, in as large quantities as can be borne. It is an active germicide—very rich in oxygen, which it is believed, by some, to hold in combination as ozone; at any rate, ozone is liberated when the permanganate is decomposed.

This is done very easily by any organic substance, and this fact may be utilized to get ozone into the blood. If the ozone be the destructive agent to the zymotic poisons when poured into the atmosphere, it is reasonable to think that it will prove such when introduced into the blood.

As soon then as the permanganate is swallowed it would be decomposed by the organic contents of the stomach or by the walls of the stomach, and begin to liberate ozone, which would be absorbed by the watery contents of the stomach, and pass with them through the absorbents into the circulation. In this way the system could soon be charged with ozone, if unluckily the stomach did not refuse to tolerate the process.

Chloral hydrate is a famous disinfectant, why not give it a trial internally as a remedy for diphtheria? Some one of us must begin the search, or the effective treatment of diphtheria will never be discovered; but in trying such new plans we had better not neglect the only two things for which any real evidence of usefulness exists, quinine and chlorate of potash.

It behooves us all to give close attention to this matter, for we cannot, however we may hope to do so, expect to entirely escape the trials which are incident to malignant epidemics of diphtheria.

These disconnected remarks, on a subject of the greatest importance, are respectfully submitted.

Reports of Societies.

Michigan State Board of Health.

The regular quarterly meeting of the State Board of Health was held in Lansing on Tuesday, January 14, this being its first meeting in its rooms in the new capitol building. The following members were present: R. C. Kedzie, M. D., President; H. O. Hitchcock, M. D., Hon. LeRoy Parker, Rev. D. C. Jacokes, and Henry B. Baker, Secretary.

ADULTERATION OF SUGARS, SYRUPS AND HONEY.

As committee on food, drink and water supply, Dr. Kedzie made a verbal report on table sweets, showing the methods of adulteration now practiced. One of these is by the use of glucose, which is an inferior article of sugar, formed by the action of sulphuric acid on starch. In sugars thus adulterated, there is usually found sulphuric acid and copperas. Another method lately practiced has been for the lessening of duties, and consists in coloring sugar so as to make it appear of lower grade. The danger comes from the poisonous chemicals used in bleaching. Dr. Kedzie also mentioned the fact that where bees are fed on glucose, this substance will be deposited in the cells without change. In connection with the adulteration of sugar, the doctor also said that one bushel of corn would make about 40 pounds of grape-sugar or glucose. Where the sugar is of a blue tinge, it is an evidence that blueing has been added to the sugar to relieve the yellow appearance due to the adulteration. The experiments and reports heretofore made by Dr. Kedzie, had been made the basis of a memorial to Congress, asking legislation upon the subject.

VENTILATION OF BUILDINGS ALREADY CONSTRUCTED.

As committee on the subject of ventilation and heating of buildings, Rev. Mr. Jacokes read a paper on the heating and ventilation of buildings already constructed. He first showed the importance of good ventilation, and then pointed out many ways in which buildings already constructed, faulty in this particular, could be improved. One method was the leading of fresh air from out doors to a jacket enclosing a space around a stove, and withdrawing the foul air from the floor level by means of pipes which lead from near the floor to the chimney above. He showed many diagrams illustrating the methods of improving the ventilation in buildings already constructed. He gave one illustration of a church which had been insufficiently warmed by three stoves, but which was afterwards thoroughly warmed and ventilated by one of these stoves, properly jacketed, and the cold and foul air withdrawn from the floor level. The ventilation of two churches by a similar method cost but $10, and ventilating apparatus for dwellings costs from $1.25 to $10.

ILLUMINATING OILS.

As committee on special sources of danger to life and health, Dr. Kedzie made a verbal report on illuminating oils. In this report he brought before the board a sample of "mineral seal" oil, a new brand, which stands a flash test of 260 degrees, by the Michigan method, and will also stand the Michigan chill test. He exhibited a lamp filled with this oil, which gave a brilliant light equal to 26 railroad candles. This oil is manufactured for the Standard Oil Co., in Cleveland. It sells for 40 cents a gallon. It is made by freezing the paraffine out of heavy paraffine oil. He recommended the use of this oil on railroad cars, under very stringent provisions. He showed the safety of the oil by heating it to 254 degrees and plunging lighted pine sticks into it, when they were immediately extinguished.

He also brought up for discussion the question as to what action the board shall take with reference to illuminating oil for ordinary purposes. As showing the ways in which certain parties seek to evade our laws, he exhibited a specimen of oil and the dealers' circular in connection with it, claiming a new and safe illuminator called "Potalene." It was on exhibition at the State fair, pleading for a premium. He put 15 drops in a heavy glass bottle and touched a lighted match to the mouth of the bottle, when the flames and smoke shot several feet high. He said this oil was simply naptha in which potatoes had been soaked.

It was voted that the interests of life in this State will be subserved by maintaining the present tests for illuminating oils. Dr. Kedzie was requested to make a thorough investigation of the whole subject, and to act for the board in endeavoring to maintain the present tests.

REGULATION OF MEDICAL PRACTICE.

LeRoy Parker, committee on legislation in the interests of public health, read a report on the subject of the Illinois law regulating medical practice, and on the proposal to regulate the practice in Michigan. The Illinois law compels an examination by a State board, and the effect is to drive quack doctors out of the State, and some have come to Michigan. He recommended the enactment of a law by the Michigan Legislature requiring practitioners to undergo examination.

Dr. Hitchcock presented the form of a memorial to the Legislature on the same subject, expressing the opinion that great injury is being done to the health of many persons in this State, and that many deaths occur because of treatment by ignorant and unscrupulous pretenders, bearing the name of doctor, with, perhaps, the title of "M. D." He recommended an examination of practitioners in anatomy, physiology and pathology of the human body, and in chemistry and botany. The memorial was adopted.

SANITARY TOPOGRAPHY.

LeRoy Parker made a verbal report on a memorial to the Legislature on the subject of a topographical survey of the whole State for sanitary purposes. Dr. Baker was added to the committee, and it was recommended that the survey should not only be topographical, but should embrace all sanitary subjects, especially those relating to water, as, for instance, drainage, pollution of streams, water supply, etc.

SANITARY CONVENTIONS.

Dr. Baker, who was a committee to prepare for a sanitary convention at Coldwater, reported that owing to the death of Dr. J. H. Beech, of that city, the local support to the movement was withdrawn, and it was impossible to hold the convention. Much work had been done in preparing for this me he had endeavored to secure such a meeting at some other place. A communication was received from Dr. J. H. Kellogg, of Battle Creek, inviting the board to hold a meeting at that place, pledging the support of the citizens of that city to make the meeting a success. The subject was postponed to the April meeting.

A committee was appointed to draft resolutions relative to the death of Dr. Beech, and its chairman, Dr. Hitchcock, presented the following preamble and resolution, which was adopted by the board :

" *Whereas*, We have heard, with deep regret, of the death of Dr. J. H. Beech, of Coldwater, therefore,

"*Resolved*, That in the death of Dr. Beech, this board has lost one of its most interested and efficient correspondents, and the people of the State have lost one of their most intelligent, earnest, and practical sanitarians."

WORK IN THE OFFICE.

Secretary Baker made his quarterly report of work done in the office : 1,258 copies of the fifth annual report of the board had been wrapped, directed and sent to the officers and members of the local boards of health in the State ; a pamphlet on the restriction and prevention of diphtheria, and a copy of Dr. Kedzie's lecture on " Healthy Homes for Farmers," were sent with each report ; a copy of the pamphlet on diphtheria was sent to each physician in the State whose name and address could be found in the office, some 3,600 in all. Mortality statements of the city of Lansing have been sent to 50 exchanges each month in the quarter. An index of 3,000 names on books in the office has been made. Meteorological observations have been taken at the office, and meteorological reports from different parts of the State have been examined and filed, as have the weekly reports of diseases from about sixty observers of diseases. The compilation of the 6th annual report has been completed, the proof read, a full index made, and the volume printed. Distributions of blanks to meteorological observers and to observers of diseases have been made. Blanks and circulars for reports of health officers and clerks of local boards of health have been prepared. The work of compiling the weekly reports of diseases, meteorological reports, etc., for the 7th annual report has been commenced. Much extra labor has been caused in the removal of the office from the old State offices into the then unfurnished rooms of the new capitol. The Secretary presented advance copies of the 6th annual report for the year 1878.

DIPHTHERIA STATISTICS.

The Secretary presented reports from Dr. E. N. Palmer, of Brooklyn, Jackson county, relative to the outbreak of diphtheria in that section. During a period of five months, there were 67 cases and 11 deaths. He gave several instances where diphtheria had been communicated by persons convalescent from that disease ; also, by persons who did not have the disease at all, but were in attendance on patients.

The document on the prevention and restriction of diphtheria, issued by this board, has been in great demand, not only in Michigan, but throughout other States and Territories.

DRAINS AND SEWERS.

Dr. Baker presented a communication from A. C. Sekell, city surveyor of Grand Rapids, transmitting rules and regulations of the board of public works in that city, with reference to house-drains and sewers, and moved for the preparation of a circular asking the facts concerning the regulation of drains and sewers in the cities of Michigan, and also, the views of sanitary experts and engineers, with a view to making some general recommendations for the benefit of the many small cities and villages now just beginning to consider the subjects of drains and sewers.

By request of members of the board of control of the State public schools, Dr. Baker presented the subject of the temporary maintenance of diseased and crippled children at the State Hospital in Ann Arbor, as a means of preventing sickness and pauperism in after life.

After the auditing of bills incurred during the past quarter, and the transaction of other necessary business, the board adjourned to the annual meeting, April 8th, 1879.

Academy of Medicine.

January 14th, 1879.

WRITTEN COMMUNICATIONS.

Dr. Bradley read the paper of the evening, entitled "Hour-glass Contraction of the Uterus." (See LANCET, page 95.)

Dr. Jenks.—I have little to say upon the subject, but from what I have heard, it is still not too clear to my mind, but that hour-glass contractions can take place above the internal os. No doubt, many of the published reports of such cases are but the histories of patients with retained placentæ. I am glad to have heard the paper, as it contains suggestions worthy of serious consideration. No doubt, the doctor's idea would be easily admitted by those, who, like Taylor, of New York, do not believe that any shortening of the neck takes place in labor.

Dr. Robertson.—From the lectures which I heard in Vienna, I inferred that the contraction was always at the internal os, but that the flaccidity of the parts below made the stricture appear much higher up.

Dr. Shurly.—I have never had a case like those related in the paper, but the best explanation which I have heard of such a condition is the one given by the doctor.

Dr. Jenks exhibited a uterine probe invented by a workman of Codman & Shurtleff's, of Boston. It consists of a long and short extremity attached to both ends of an ordinary probe handle; any deviation from a straight line in the long extremity is made manifest by a deviation in the opposite direction of the short extremity.

VERBAL COMMUNICATIONS.

The first week in November a friend from New York came to me with his daughter, a healthy young lady of seventeen, for the purpose of having her eyes treated for binocular zonular cataract. An operation had been recommended by two eastern specialists. The lenticular opacity in either eye could easily be seen and was remarkable in size, leaving only an exceedingly narrow zone of clear lens surrounding it, which was made visible by dilating the pupil ad maximum with atropin. Upon ophthalmoscopic examination, indirect method, I found I could look through the opacity of either eye and discern quite distinctly the fundus oculi and optic disc. With x8 glasses she could easily read No. 5 Jaeger's test type. With these facts before me, I confess I was placed in an unpleasant position, for although an operation had been recommended by the parties above mentioned, I could not, consistently with what I had discovered, agree with them. As the gentleman was going to visit St. Louis, I advised him to consult and gave him a letter to my friend, Dr. John Green, of that city. The doctor took great interest in the case and held it under close observation for more than two weeks, and here is what he wrote about it.

"I find well-marked zonular cataract in both eyes, but with a perfectly clear outer zone. Under atropia, vision was not improved at first, but with x$\frac{1}{9}$ R and x$\frac{1}{8}$ L., vision became ultimately $\frac{16}{\mathrm{XX}}$ R and $\frac{16}{\mathrm{XX}}$ L. I found that atropia, two grains to the ounce, used once in five or six days sufficed, with glasses x$\frac{1}{9}$ R and x$\frac{1}{8}$ L, to keep $V=\frac{16}{\mathrm{XX}}$ or $\frac{16}{\mathrm{XVX}}$. With x$\frac{1}{6}$ R and L, she reads newspaper print fluently. Now for my suggestions: 1st. With atropia used once in five or six days and wearing convex glasses ($\frac{1}{9}$ and $\frac{1}{8}$) vision is substantially perfect for distance with both eyes, and she reads fluently all ordinary type with x$\frac{1}{6}$. 2d. This is probably as good vision as she ever had, the seeming failure of sight when the cataract was first detected being very probably the result of contraction of the pupils incident to the strong accommodative effort required to overcome the hypermetropia. 3d. Vision may continue to be good as at present, possibly throughout life. I have seen a case almost the counterpart of this in which the history was complete for over twenty years, (say from ten to thirty years of age), and in which the marginal zones of the lenses remained perfectly clear.

I should advise, therefore, against any operation. Vision cannot be made better by operation than it is now, using atropia at intervals of four, five or six days. After an operation she would require two pair of glasses as now, but stronger ones. The question is then between the risks of an operation and the inconvenience of using atropia, and I think there is no rea. question as to the preferableness of the latter."

In the above, his opinion is stated in decided terms. In the meantime, I took occasion to consult by letter two other eminent oculists; one of them advised to leave the eyes alone, while the other recommended an iridectomy, but on account of the exceedingly narrow zone of transparent lens which remained, you can all see how useless the operation would have been.

PREVAILING DISEASES.

Dr. Shurly.—I have met with numerous cases of influenza and pneumonia. A few cases of true membranous croup have also presented themselves. The first was a patient of Dr. Bradley's and fully recovered; the second and third cases I also saw in consultation, but they appeared to be in a hopeless condition; the fourth has now been sick about a week and is doing well.

The regular order of business being on motion suspended, Dr. Connor proposed the name of Dr. Hawes as an active member. The name was referred to the committee on membership.

Dr. Bradley reported two cases of cyanosis neonatorum. One of them proved to be very grave, as over an hour elapsed before the alarming symptoms disappeared.

Dr. Jenks.—In all my obstetrical operations I have always used chloroform and thought there was but little danger from its employment, if proper care were taken. Lately I have used ether in a number of cases, and its effects upon the child seem so apparent that I wish to mention the facts before the Society. My first case was that of a woman who had been in labor for a long time and to whom considerable ether had been administered. When I arrived I found that she had given birth to a dead child about an hour before. The cord encircled the neck very closely. A few days afterwards, in one of my own patients, the first part of labor passed very quietly, but in the second, ether was given to profound anæsthesia. The child was born asphyxiated, of a purple color, but there was no loop of the cord about the neck. I allowed a spoonful of blood to flow, and then handed the child to the nurse. Twenty minutes afterwards the child was so dark that I have never seen such black mucous membranes as it presented. Hot and cold baths and the battery were employed and for moments the child would seem to improve and would then again become as cyanosed as before. An hour and a half passed before perfect respiration was established, but the child, now a month old, has since shown no blueness of the surface. Lately another physician has had the same experience with ether administered only in small quantity.

Dr. Bradley.—I remember a case that occurred in Massachusetts, where a New York lady insisted upon having ether in her labor. Her child was born dead, and I have always thought that it was the ether that killed it.

Dr. Lyons.—A man, shortly after having a large insurance placed upon his life, suddenly died. The seizure was sudden and of short duration; general convulsions quickly followed by death. The latter was supposed to be due to strychnia poisoning. The defense was that he died from injuries to the spinal cord received from a fall in a wrestling bout, some two weeks before. He then vomited a little, but no further symptoms showed themselves till the convulsions. Three or four months after death, an examination of the internal organs revealed no trace of strychnine. Query: Could an injury of the spinal cord give rise to the symptoms of such a case?

Dr. Shurly.—I believe there is a case on record of a laborer who, having fallen from a height, presented such symptoms. But in his case, they came on immediately after the accident.

The meeting was adjourned.

January 28, 1879.

Dr. Walker read the paper of the evening, upon the "Treatment of hip-joint diseases."

Dr. A. M. Hawes was elected a member of the Society.

MISCELLANEOUS.

Dr. Connor presented a specimen of "duboisin," a new alkaloid, extracted from an Australian tree. It was first tested by DeWicker and Galezowski, of Paris, and in this country by Prof. Seely, of Cincinnati. It acts more rapidly than atropia, whilst its effects pass off much more quickly. It is less irritating to the eye, and the poisonous effects are less marked than those caused by atropia. If the practical use of it confirms our present experience of its effects, it will prove a valuable addition to our remedies.

Lately, I have obtained some very good results from the use of a solution of ergot in affections of the conjunctiva. A little child who about this time every winter has a severe attack of conjunctivitis, was taken as usual a short time since. I brought over to the house a solution of ergot and instilled a drop between the child's lids. Having waited for a half-hour, I opened the lids and found that all the smaller vessels had already disappeared. The continued use proved likewise beneficial. It has been found lately that the muriate of pilocarpine acts well in the same doses as eserine; but as a solution of the former keeps as well as one of atropia, whilst one of eserine spoils quickly and is more expensive, it is advantageous to use pilocarpine.

PREVAILING DISEASES.

Dr. Carstens.—I have met with numerous cases of the prevailing epidemic disease. Some call it influenza, but it differs decidedly from the form which we had about two years ago. At the present time, the patients have an erythematous sore-throat, stiffness of the cervical muscles and neuralgic pains in the bowels and chest. I believe it to be contagious, as it spreads from one member of a family to the others, one person coming down after the other. Some scarlet fever still prevails, and I have lately met with some peritonitis.

Dr. Robertson.—We have received within the last few days two cases of peritonitis in St. Luke's Hospital, one apparently idiopathic.

Dr. Jenks.—My attention to-day was directed to the number of malarial cases which I have lately seen. The prevalence of this class of troubles at this season of the year is certainly peculiar. Can it be that they now arise more frequently in winter than formerly, on account of the new source of our water supply ?

Dr. Connor.—The English health reports show that the temperature during the first three weeks of December was 30° to 40° lower than during the same period of the preceding two years. The mortality reports of the twenty largest towns of Great Britain show an increase of 3,000 to 4,000 deaths during the same three weeks as compared with former years. Public opinion, to the contrary notwithstanding, it is now a conceded fact in vital statistics, that a long spell of steady cold increases the mortality. The most feeble fall first and I believe that the disease mentioned by Dr. Carstens is but the effects, now felt by the stronger, of the severe strains to which the nervous system was exposed in carrying out its functions during our season of extremely cold weather. We possess no better nerve tonic than quinine, and hence we see its applicability in the present troubles.

On motion, the meeting was adjourned.

E. A. CHAPOTON, Sec'y.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The Lay Public—Its Education in Certain Matters a Condition for the Best Growth of the Medical Profession.

At the last meeting of the Ohio State Medical Society, its president entered to some extent upon the consideration of medical experts. The society, recognizing its practical relations, ordered many copies of the address printed and distributed to the legal profession. In a general way, this address points out the absurd and unjust position now occupied by medical men when called upon to act as experts. Certain it is, that in many cases, the medical experts are made the laughing stock of the court and community.

The author suggests that competent medical experts should be selected by the State by competitive examinations, and be appointed for life. Their compensation should be ample, so that the best men would desire the position. To these let all medical questions arising in the courts be referred.

We have been much interested in this matter, by observing in the several trials for murder or manslaughter that the cases came to naught, owing to the fact that the original medical investigations were not made with sufficient exactness to be of any legal value, and that the expert's testimony was feeble and contradictory. These trials cost the people many thousands of dollars. The result is either that innocent people are unjustly accused, and occasioned much trouble, anxiety and expense, or, that the guilty get free. Clearly, such medical evidence is a farce. Suppose that the people in a city or a portion of a State employed a competent expert, and made it his duty to examine the facts of every medico-legal case, then we might be sure that no case would come into the courts unless the evidence were strong enough to probably convict. If it did come to court, the expert would be able to give his testimony in a manner that would do genuine service to justice and honor the profession. Few would doubt the importance of such evidence; but at present, the people are too parsimonious to pay the salary necessary to secure a competent expert to spend his time and talents for the public good. To us, it is clearly demonstrable that such an expert would save those whom he served many thousands of dollars yearly. Then he would honor the medical profession by more truly representing it to the public.

The entire subject of the relation of the profession to the people, needs constant agitation until the people are induced to make the needed reforms. This will involve the instruction of the lay public upon the great subjects of health and disease. Its life-blood is being drained away with none to prevent it. Its prejudices and its barbarian ignorance injures both itself and the profession.

Thus it lays all possible obstacles in the way of our obtaining a knowledge of practical anatomy, and yet it mulcts us for any practice supposed to be at variance with anatomical knowledge. Thus, on the one hand, it interferes with the best medical education, and on the other subjects us to great penalties, when, in its ignorance, it decides that we are not properly educated. There is great need of earnest missionary work in this direction. Some of our boards of health are doing what they can in this direction; but most local health boards are so constituted as to be in the main a farce.

In justice to itself and to the people alike, the medical profession, by its organizations and individual members, should plan wisely and execute fearlessly all conceivable methods for the elevation of the people to some proper appreciation of its relation to the medical profession.

Among the subjects, concerning which they are in darkness, more profound than that of Egypt, are the dissection of human bodies; the vivisection of animals; medical experts; medico-legal investigations; coroners' inquests; the care of the insane; private and public health in their infinite variations.

If only we can get the people to see a glimmer of the real facts respecting the above, in their relation to its own best interests, then we will find that it will support by words of cheer, and by proper financial reward, the best attainable talent in the profession. Then the schools will be taxed to their utmost to supply the demand for such talent. There will be such evident need for the higher medical education as to practically abolish all but the schools fitted to supply this need.

In short, a certain education of the people in matters pertaining to their health and diseases, and our social relations, is absolutely necessary in order that they may recognize, appreciate and patronize the learned, safe and cultured physician. From a lack of this education spring evils we have alluded to and many others.

Report of the Congressional Committee on Yellow Fever.

The Congressional experts on the yellow fever epidemic reported Jan. 30th. They confess that their investigations have been incomplete, and recommend that two or three skilled experts be charged to finish the task, and to study the disease at its home in the West Indies. They regard the disease as an exotic in all countries other than the West Indies. In future quarantine they suggest that there be two classes of officers—one for foreign and one for home service—each looking after the diseases of their respective stations, and reporting to the other, thus enabling them to more effectually supervise travel in the interests of public safety.

In this connection the suggestions of Dr. Vanderpoel, health officer of New York, are of interest. His view is that yellow fever is best dealt with at its fountain head. This fountain head he locates in the West Indies, and especially Havana. His suggestion *(Bost. Med. Jour.)* is "that the government of Spain be solicited to unite with that of the United States in the appointment of an international commission, which shall proceed to Havana with a view to examine the sanitary surroundings of that city, and their relations to the propagation of the scourge, and that the Spanish government be earnestly requested to fully carry out the joint recommendations of such commission." This proposition strikes us as the most common sense one that has yet been presented. We trust that the two aforementioned governments may be induced to practically test its value. Let the causes that produce yellow fever be removed, and of course the disease is stamped out.. The importance of the matter, both to the Spanish and American people, is of such financial weight that we have a hope that money considerations may induce them to act, even if they care naught for the lives and health of their subjects.

The last epidemic cost many millions of dollars.* Can these governments afford to withhold a few thousands in ascertaining its exact cause, and a few more thousands in its removal? All this apart from the vastly greater humanitarian and social consideration, so obvious to every medical mind.

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*The most careful estimates of the money loss to the United States alone place it at between two and three hundred millions of dollars.

Medical Legislation in Michigan.

We have just received a copy of a substitute for the Robbins' bill to " protect the people of Michigan from empiricism and quackery." It was introduced by the committee on public health. The first feature of the bill is that it guarantees all practitioners to possess a diploma or equivalent knowledge. The basis of this guarantee is the organization of a board of examiners by each of the regularly established State medical societies. All persons not possessing a diploma or a certificate to practice from one of these boards, are subject to penalties.

It will be seen that in the provision for boards of examiners from the several State societies, this bill resembles the California law. For ourselves, as the object of the law is to protect the people through the law, we should have preferred that there be but one board of examiners, and that this be appointed by the governor with the aid of the State board of health. What with several boards acting through the several State medical societies, there is a complexity of machinery liable to operate with much friction, and very imperfectly. Then, it strikes us that success would be more certain if the matter were so arranged as to take care of itself, without the direct influence of the medical profession. If only the governor and State board of health were responsible in the matter, it would look more as if the people inaugurated and executed the law in its own interest. The profession would then bear the same relation to the law as other citizens. The stigma that the bill was in the interests of a class, would, we think, be removed. The best law will be one to which such a stigma cannot attach itself, and which all will recognize as in the interests of the entire people of all classes, grades, or professions. We shall carefully follow the fortune of this and other bills now before our Legislature.

The Russian Plague.

During the winter a very fatal disease has arisen in south-eastern Russia. Thus far, it has not extended over any large tract of country, but all Europe is full of fear as to the result.

As to the nature of the disease there have been most diverse accounts. The Russian government has steadily claimed that it was a typhus fever, while others state that it is the old plague of the middle ages. Some accounts refer to buboes as a constant character of the affection. Others deny that any such phenomena appears. In fact, after a careful study of all accounts, we are unable to determine the precise nature of the pestilence. It is certain, however, that it is fearfully fatal—from fifty to ninety per cent. of all attacked dying; it runs its course in a few hours, or at most a few days; it is in the highest degree both contagious and infectious, and no remedy or plan of treatment has been found to check its ravages. It seems probable that the disease originated among the famished myriads of China during the past two warm years. In this respect it resembles the last great plague that swept over Europe.

It seems probable that the disease begins "suddenly, with a severe headache, followed by mental confusion, great prostration, rapid development of buboes in the groin, arm-pits, and elsewhere, with petechiæ, vibices and hemorrhage from the lungs, runs a very speedy and almost invariably fatal course, ending in from twelve to forty-eight hours" *(Brit. Med. Jour.*, Feb. 1st, '79).

Frantic attempts are being made by Russia to limit the disease to the province of Astrachan, but with little apparent success. The government seems to have been struck by the panic, as also have the German and Austro-Hungarian governments. Resort is had to the old traditional measures of quarantine, although the most abundant experience has demonstrated the futility of such measures. We trust that other European people will at once see the necessity of "strengthening and extending such measures of local sanitary administration as have proved most efficacious in the control of infectious maladies."

At present, the territory over which it has appeared is quite small, so as to induce the hope that the inauguration of wise measures may effectually prevent any great extension. Meantime we shall closely notice any careful scientific study of this pestilence.

Call for a Convention of all American Medical Colleges.

We have before us a circular issued by the "American Medical College Association," calling for a meeting of all "regularly organized and accredited" medical colleges, at the city of Atlanta, Ga., May 2d, 1879, at 10 o'clock a. m. The *object* of this call is to consider and, if possible, adopt "some uniform system of instruction more in harmony with the requirements of the age." It is desired, if possible, to make an advance all along the line, by all the colleges that are now doing honest, efficient work in the cause of medical education. While the American Medical College Association has made some progress by its own methods, it is felt that a convention embracing the members of this association and all other colleges would be especially appropriate just now.

The call designates the number of delegates to be sent by each college as two—one to represent the board of trustees, and one to represent the faculty—both empowered to act for the college in any matter deemed advisable by the convention.

As by the call the attention of the convention is confined to advancing the grade of instruction and rendering it uniform, it seems more probable that tangible results will be attained. The full text of the call, including the preambles and resolutions of Professor S. D. Gross, will be sent to any one that signifies his desire to possess them, by writing to the secretary of the "American Medical College Association," 92 Cass street, Detroit, Mich.

Discussion of the subject matter of this call is earnestly requested from both the medical and secular papers, by medical societies and medical men everywhere. Discussion being in order, we submit that in our judgment it is perfectly practicable for all American medical colleges to demand attendance upon *three regular terms* during *three separate years*, as one of the conditions for conferring the degree of M. D. Let all the colleges adopt this as a minimum and the matter is settled. Objection to the course on the part of the colleges can only be based on the plea that it will diminish the number of students. We reply that as all will be required to spend one-half more time in college, it is more than probable that the yearly classes will be quite as large. Thus, in numbers and in fees we do not see that the colleges will lose aught, while the profession will gain, first, in better qualified graduates, and in a diminished number of the same. The adoption of the plan by all would preclude the possibility of the students crowding those schools that required least. Then it is a settled conviction among both medical teachers and the most intelligent part of the profession, that modern medicine cannot be mastered in a shorter period than three full terms. Other suggestions will be offered at another time.

Memoranda.

About 250,000 flowers are required to produce an ounce of oil of rose.

The process of sewing up a lacerated cervix is called *hysterotrachelorrhaphy*, so gynæcologists tell us.

L. Burstal recommends benzine as a sure means to kill moths, bed-bugs, all kinds of lice, etc.

The *Medical and Surgical Reporter* states that the hospitals of Philadelphia contain about 1,200 empty beds.

The cardinal principle of State medicine is that *each man* is *safely kept* only as he *safely keeps his brother.—Kedzie.*

Dr. M. Binee says that the want of the medical profession is thoughtful men; and thinking capacity, rather than mere amount of information, should be tested at cross-examination.

Ruskin says: "If you want knowledge, you must toil for it; if food, you must toil for it; and if pleasure, you must toil for it." He who has learned to love to work leads a happy life.

The *Southern Medical Record* states that a new medical college is being organized at Atlanta. All who desire positions in said college will address Dr. Wood, managing editor of the *Record.*

Blood pressure cannot be lowered directly by bleeding, unless the quantity removed be dangerously large. Nor is there any necessary connection between a high blood pressure and fulness of blood or plethora, since an enormous quantity of blood may be driven into the vessels without any marked rise of pressure.——*Foster.*

Mr. W. H. Power *(Sanitary Record,* January 10, 1879,) traces the cause of a virulent epidemic of diphtheria occurring in North London, last summer, to the milk obtained from one dealer. In this epidemic two hundred and sixty-four cases occurred, and thirty-eight deaths. How the milk became infected he is thus far unable to state, as all ordinary sources of infection could be excluded with absolute certainty. He raises the question, whether the milk may not have been fouled by particular cows suffering from specific disease. The London Pathological Society have promised a careful study of the case.

On page 69 of this volume of the LANCET "new suit" should read, "appeal of old suit;" "absence of sanity" should read, "absence of safety." On page 70, second line from top, " radically" should be "medically."

Brinton's Half-Yearly Compendium is before us, as a faithful and judicious selection of the important advances in medicine and surgery made during the last half of 1878.

The Illinois State Board of Health gives the following classification of physicians in that State. The total number is 4,950; of these 3,646 are regular; 437 homœopathic; 456 eclectic; 37 physio-medical; not stated, 336; all others, 38.

"One of the remedies for unjust attacks upon the faithfulness and skill of medical men, must be found in such an elevated tone of professional sentiment as would prevent us from imitating the vilest of birds that are said to foul their own nests."—*Dr. Roosa.*

The numbers thus far issued of the English neurological
Brain, fully sustain the hopes raised by its
It is a quarterly of 142 pages, and published by
o., New York. Terms, $4.00 a year. Our regu-

lar readers will observe frequent abstracts from its pages, indicating better than words the estimate that we place upon it.

The *British Medical Journal* has opened a confessional, in which any one may report his failures and mistakes, without any other than the editor knowing the name of the reporter. This is an excellent idea, as there is no doubt but that the published records as they appear in the journals are one-sided. Probably unfavorable and unfortunate experience would be more frequently published, except for the injury that would re-act upon the writer through an ungenerous use of the confession by the thoughtless or unscrupulous rival.

The St. Louis *Medical Record* announces that hereafter it will advertise *only* such medical colleges as require a *strict preliminary examination* of matriculants and attendants upon *three full annual* courses of lectures of not less than four months each. The same journal records a hand-to-hand fight with one of the associate editors of the St. Louis *Courier of Medicine.* Medical matters seem very active in St. Louis.

Dr. W. Yandell *(Amer. Practitioner)*, says: "My income has lessened just one-half in the last three years. It has fallen off for the past four months thirty-six per cent. on any similar time. * * * When I come to talk among my brother chips of equal standing, I find that they have the same reports, that the same shrinkage has occurred in their incomes. The same has occurred to all classes in this country. The only men in our profession who have gained are the young doctors who, in the natural course of things, have gathered here and there a case, now and then a patient. The whales have suffered the most; the minnows least. Had the times been prosperous we would have prospered with them. The times have brought disaster to all branches of art and industry. We who follow medicine can no more escape the calamities which affect other classes than we can fly."

We have received the first number of the *American Journal of Otology*, a quarterly of eighty pages each issue. It is published by Wm. Wood & Co., New York, for $3.00 a year. Dr

Clarence J. Blake edits it, and is assisted by an able corps of workers in this specialty. It is issued in excellent taste. This number contains an article by Dr. C. J. Blake on "the Graphic and Photographic Illustrations of Sound Waves;" one by Dr. Chas. H. Burnett on "Twenty Cases of the Growth of Aspergillus in the Living Human Ear;" one by Dr. Albert H. Buck on "Syphilitic Affections of the Ear," and one by Dr. Samuel Sexton on "the Use of Calcium Sulphide in the Treatment of Inflammation of the External Auditory Meatus." The remainder of the issue is occupied by book notices and reviews. In another place we shall present abstracts of the articles of general interest.

The *Archives of Medicine* is the title of a new bi-monthly journal, edited by Dr. E. C. Seguin and published by the Putnams, of New York. Each issue contains 112 pages. Terms, for a year, $3.00. Dr. T. E. Thomas presents a "New Method of Removing Interstitial and Sub-mucous Fibroids of the Uterus;" Dr. Mary Putnam Jacobi makes a provisional report on the "Effects of Quinine upon the Cerebral Circulation;" Dr. C. Hertzman presents a statement of the "Aid which Medical Diagnosis receives from recent Discoveries in Microscopy;" Dr. A. F. Delafield gives an "Elementary Lesson in Electricity." As an editorial, Dr. Seguin lays before us "the Present Aspect of the Question of Tetanoid Paraplegia." New books are reviewed; abstracts and summaries follow, and the number closes with short "original observations." The issue is, mechanically, a perfect specimen of the printers' art, set forth with singularly good taste.

The Chicago *Medical Journal* has been carefully studying the fifty-three regular medical journals now published, and reaches the following conclusions: 1st. Only from fourteen to twenty are of any permanent value to the profession and worthy of general circulation, or to be sent abroad and handed down to posterity as fit exponents of American medical periodical literature. 2d. Some of the others possess no value whatever apart from the gleanings which they regularly make from the crops carefully harvested by their more thrifty neighbors.

3d. Some are absolutely worthless, judged from any stand point, and a few are undeniably worse than worthless. They are dangerous and disgusting parasites upon the body medical." * * "It is the duty and interest of every physician in the land to support heartily the best of our journals and none other. Let it be understood that it is a stigma upon one's reputation that his name has appeard in an obscure advertising sheet in connection with the endorsement of a questionable 'novelty' in drugs, or even as an author."

We have received the first number of the *Index Medicus*, a monthly classified record of the current medical literature of the world, compiled under the direction of Dr. John S. Billings, Surgeon, U. S. A. It fully sustains the promise of its prospectus. It is exactly what its title states it to be, and as such commends itself to every physician in the land. From it he may learn each month what new articles have been published in any journal in any language during the previous month. The number before us contains a full list of all the periodical medical publications of the world. Most heartily do we recommend this work to every doctor as absolutely indispensable to his list of medical journals. The elegant manner of its issue reflects great credit upon the publishers, F. Seyboldt, of New York.

Obituary Notices.

At the annual meeting of the St. Joseph Valley Medical Association, held at Three Rivers, Mich., January 15th, 1879, the following resolutions were unanimously adopted upon the death of Dr. E. A. Egery, who located at Three Rivers forty years ago, to practice his profession, when the country was comparatively new. He was an active practitioner until disabled by disease, but up to his death took an active part in the interests of the profession. His efforts to form the various medical societies with which he was connected were untiring, neglecting no opportunity whereby the physician might be honorable in his calling and true to his fellow men:

WHEREAS, It has pleased God in his wisdom to remove by death from our number our friend and colleague, Dr. E. A. Egery, therefore,

Resolved, That in the death of Dr. Egery this association has lost one of its founders—its first president—one that took an active part in the association's interests, and for the advancement of medical science.

Resolved, That as a practitioner he was true to his profession, precise, clear in his diagnosis, careful in prescribing, and his efforts to ameliorate suffering won for him a warmth in the hearts of the people, and by so doing set examples we may all be proud to imitate.

Resolved, That a copy of these resolutions be transmitted to the bereaved family, and that they be published in the Three Rivers papers and DETROIT LANCET.

W. M. IKELER,
EDWIN STEWART, } Committee.
GEO. M. TROWBRIDGE,

Dr. Nathan Mitchell died at his home in Colon, St. Joseph county, Michigan, January 26th, in the seventy-first year of his age. Dr. Nathan Mitchell was born November 27, 1808, in the town of Calais, Washington county, State of Vermont. His father being a farmer, he was early trained to agricultural pursuits, which he followed until he became of age, securing at the same time more than an average education from the limited educational advantages of those days. He immediately commenced the study of medicine, and in 1830 entered the Middlebury Medical College, and graduated in 1834. Starting immediately for the far west—as it was considered in those days—he located in Trumbull, Ashtabula county, Ohio, and practised his profession successfully in that place for five years.

In 1839 he came to Michigan and located in Colon, St. Joseph county, where he has been ever since. Commencing as he did with the early settlers, he has shared all the ups and downs of a new country with them, and for forty years has been a faithful physician to the people, riding far and near in an early day to relieve suffering, and oftimes without money and without price.

About two years ago a cancer made its appearance on his lip, and has steadily progressed, destroying all the lower portion of one side of the face, including gums, jaw and neighboring lymphatic ganglions. The doctor bore his afflictions in a remarkable manner. He suffered one operation in its early stage, and used all the means he could command to arrest the disease, but to no purpose, and for the last few months has patiently awaited the slow but sure result. The doctor was a careful student, possessing a very active and retentive mind, ever anxious to grasp all the advancements in the science of his profession. He was a member of the St. Joseph Valley Medical Society and the Michigan State Medical Association, and his professional acquirements were held in high esteem by all who knew him.

Book Notices.

Any Book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

SIXTH ANNUAL REPORT OF THE SECRETARY OF THE MICHIGAN STATE BOARD OF HEALTH, for the year ending Sept. 30th, 1878. Cloth; pages, 434.

This volume contains the report of the secretary's office, including forms of the blanks distributed during the year; abstracts of the proceedings at the meetings of the board, and special reports on outbreaks of typhoid fever and scarlet fever, etc., and sixteen reports and papers upon various subjects pertaining to public health.

In recording the details of two kerosene lamp explosions, Dr. Baker calls attention to the two sources of danger arising from the quality of the oil employed. (1.) A composition that enables the oil to flash at a temperature lower than 140° F. (2.) The presence of paraffine in the oil, which so clogs the wick as to greatly heat the wick tube, and so raise the temperature of the superficial strata of oil in the lamp far above 140° F. Thus, an explosive compound is produced in the lamp that may produce the most disastrous results. The Michigan law provides for these sources of danger, and by inspection eliminates them almost, if not entirely. Another danger not obviated by law, is the liability to an explosion from the breaking of the lamp chimney. The draft being thus diminished, the wick tube becomes greatly heated, and the upper chamber of the lamp filled with vapor of oil, which, on admixture with air, becomes explosive. The results of the board's labors in eliminating the causes of danger to life and property has been gratifying in the highest degree. In this way alone it has saved to the commonwealth far more than the entire expense of the board. In his annual address, Prof. Kedzie graphically details various points in the work of the board. He thinks that standard works on hygiene should be prepared for the public schools, if those now written do not meet the present needs. He endorses the work of Dr. Baker in his combined study of meteorological conditions with prevailing diseases. But he desires to have the comparison made for each locality in the State. He recommends the preparation of a tract which shall state the principles and methods of preserving food materials so as to suffer the least change or loss of nutritive and digestive qualities; and the principles and processes by which such materials are converted into wholesome, palatable and digestible food. Then he further emphasizes the advantages of an early sanitary survey of the State.

We hope that this suggestion may be carried out by the present Legislature, and that the requisite sum of money be appropriated to accomplish the purpose. Various reasons are adduced for the holding of sanitary conventions.

Dr. Hitchcock reports the doings of the American Medical Association, in so far as relating to public health. Dr. R. C. Kedzie in a similar manner reports the proceedings of the American Social Science Association; Dr. Baker, the proceedings of the Michigan State Medical Society, and Dr. Lyster, his lectures on public health. Dr. Kedzie has a paper of great practical interest upon "lead poisoning by the use of tinned ware and of vessels containing lead." Tinned vessels are in almost universal use for cooking, but on an examination of a large number of specimens, lead was found present in greater or lesser quantities. As the same tin is used for roofing, gutters, etc., it is plain that drinking water is in danger of being poisoned by the presence of lead. Glazed earthen vessels often have combined with their glazing salts of lead. The new "marbleized iron ware" was found to contain a very considerable amount of lead and traces of arsenic. Specimens of "granite ware" failed to reveal the presence of any injurious material. As yet, there is no safe, durable sauce-pan or baking dish.

Dr. Hitchcock, in a short paper, disposes of the idea that tomatoes have any relation to cancerous disease. In another paper the same gentleman seeks to determine what relation wood pavements and sidewalks bear to the public health. No evidence is adduced proving that such relation is injurious.

Dr. Marshall makes a special report upon "the opium habit in Michigan," largely based upon replies to a circular of inquiries sent to ninety-six physicians in Michigan. No circulars were sent to the larger cities, owing to the fact that no reliable information could be obtained. The total number of morphine and opium-eaters definitely reported from all sources, is 1,313; of these 803 are females and 510 males. The total population of the cities and villages, including the townships in which they are situated, is 225,633. At the same rate the entire State would contain about 7,763. Among the causes of this habit, Dr. Marshall ranks first, the indiscriminate use of medicines without intelligent advice.

Dr. Caulkins reports a careful study of two outbreaks of diphtheria, and Dr. Topping adduces his observations during a similar outbreak.

Dr. Farnsworth presents some of the means for preserving the teeth.

Dr. Lyster contributes a somewhat elaborate study of the climate and topography of Michigan.

Hon. Leroy Parker presents a discussion of coroners and coroners' inquests. From this he concludes that the law should be so changed as to abolish the office of coroner and coroners' juries. In place of these, medical experts should be appointed to make the physical examination in cases of persons found dead or suddenly dying. When crime is suspected, a magistrate should institute a judicial investigation.

In connection with weekly reports and answers to circulars, the secretary condenses, assorts and illustrates by diagrams the temperature of the State; the humidity of the air; the barometric pressure; the cloudiness of the sky; the amount of ozone; the diseases prevailing during different weeks of the year. One quotation from this mass of evidence : "When more than the average per cent. of the weekly reports of diseases stated the presence of croup, the air was colder and drier than the average; the ozone was excessive, and the range of the barometer was greater than the average; and the opposite conditions existed in months when less than the average per cent. of the weekly reports of diseases stated the presence of croup." This whole study of the relation of prevailing diseases to climatic and meteorological states, is one of intense interest and practical moment. A continuance of the study from year to year by our board, will tend to add largely to our ideas respecting the causation of diseases. The volume is illustrated by two maps, nine charts, and ten diagrams.

Altogether, we must regard the volume as one of the most substantial contributions to public health made during the year. The members of the board, and especially the incomparable secretary, Dr. Baker, seem to be ever at work on this matter. We cannot forbear expressing the opinion that the State gets far more than the value of its yearly $4,000 appropriation. So much work for so little pay. Still, humanity reaps the harvest of the seed planted by the board.

TRANSACTIONS OF THE AMERICAN OPHTHALMOLOGICAL SOCIETY, for 1876–7–8; pages, 248; 1878. Copies to be obtained of the Secretary 12 W. 35th St., New York City.

Dr. Arthur Mattison recommends the use of nitrous oxide as an anæsthetic in such operative cases as require but a short time, viz: strabismus, etc. Dr. Roosa discusses the relations of blepharitis ciliaris to ametrophia. Of forty-eight cases of this affection fully reported, only six were emmetropic. Dr. H. W. Williams reports a case in which he extirpated an ossified choroid without enucleating the eye ball. The good results thus obtained would indicate that removal of the anterior portion of the eye might often be substituted for enucleation in cases where an operation is indicated to avert the danger of sympathetic inflammation. The removal of the ciliary region with any foreign body that may be in the eye, seems to afford ample security against this danger. Dr. Chas. S. Bull reports a case of gummy infiltration of the tarsus, and one of amyloid infiltration of the lid and orbit—very rare diseases. Dr. Daniel Webster reports a case of spontaneous cure of subretinal effusion, by the patient keeping in the supine position for twenty-three days. Dr. C. R. Agnew gives illustrative cases of ophthalmic diseases, in which enforced exposure of the eyes to light and air was salutary. Dr. Roosa reports in detail the examination under atropine of the refractive state of fourteen eyes with normal vision, which had never been affected with asthenopia or inflammation, and reports that three only were emmetropic, while eleven were hypermetropic. Dr. John Green reports several improvements in instruments and appliances for diagnosis. Test diagrams for the detection and measurement of astigmatism; stereoscopic diagrams for testing binocular vision; a new modification of Loring's ophthalmoscope, and an improved series and arrangements of the glasses of the trial case for measuring refraction. Dr. Loring also has a new modification of his ophthalmoscope.

Portions of the papers of most general interest will be given our readers in another place. Altogether, the report indicates a creditable degree of progress in this department of medicine and surgery.

THE PATHOLOGICAL ANATOMY OF THE EAR. By Herman Schwartze, M D., Professor in the University of Halle. Translated by Dr. J. Orne Green, 1878. Boston: Houghton, Osgood & Co. Cloth; pages, 174.

This little volume is really the sixth part of "Kleb's Hand-Book of Pathological Anatomy." Besides it we know of no other comprehensive work devoted to the pathological anatomy of the ear. In the smallest possible space is given the results of all researches into this subject. In the introduction we find a concise description of the best methods of dissecting the ear in all its parts. Then, in regular order, are given in detail all the demonstrated facts respecting the pathological anatomy of the temporal bone in general; the auricle; the external meatus; the drum membrane; the tympanum; the eustachian tube; the mastoid process, and the inner ear with the auditory nerve. The text is illustrated by sixty-five well executed wood-cuts. The general style of the text is exceptionally happy, so that with the least possible effort the thought of the writer can be grasped by even an indifferent student. Were it proper to call a scientific treatise a work of art, we should say that this volume especially merited that title. It is as conspicuous for that which is omitted as for that which is selected. Of course, all aurists will possess the volume, and we cannot but hope that many others may, by it, be induced to pay that attention to this organ which its importance demands. Every page is loaded with facts of priceless worth, so that it is with difficulty that we can select any as more important than others.

One point we must emphasize: diseases of the ear are far more dangerous to life than those of any other of the special senses. Caries, of all bones of the skull, attacks the temporal bone most frequently. Its points of preference are the mastoid process; the median portion of the upper posterior wall of the meatus; the walls of the tympanum, preferably its roof; less frequently the pars petrosa, and least of all, the meatus auditorious internus. This caries is generally the secondary result of an acute or chronic suppuration of the soft tissues of the ear, which has extended to the surrounding bone. Necrosis attacks most frequently the mastoid process; the lower wall of the external meatus; the ossicula, and the pyramid. The most common fatal results from these processes are purulent meningitis; abscess of the brain; sinus-phlebitis with pyæmia, or combinations of these diseases. The disease extends in various ways along the course of the veins; along the folds of the dura mater, which extend into the fissura petroso-squamosa; along the neurilemma of the auditory or facial nerves, and along the connective tissue of the capillary blood vessels which perforate the bone in all directions. Present facts show, that as "a rule abscess of the brain is secondary, and the result of suppuration in the ear produced by an inflammation of the veins. Abscess of the brain and disease of the ear may occur simultaneously from the same cause (trauma). Abscesses of the brain from otitis are situated in the temporal lobes of the cerebrum, or in the cerebellum, more frequently on the right side."

Concerning the relations of parasites to diseases of the external meatus, Schwartz holds that no fungus can grow on healthy skin. Hence, in the so called parasitic affections of this part of the ear we have to deal with a disease of the skin and the parasitic growth upon it, or in it. The surface of the membrana tympani may, in like manner, be infiltrated with the parasitic growth, and if the tympanic membrane be perforated, the mucous membrane of the tympanum. Diseases of the middle ear bear such an intimate relation to the patency of the eustachian tube, that it is important to bear in mind the causes of its closure. These are, swelling of the mucous membrane or thickening of the sub-mucous connective tissue in catarrh; hyperplasia of the cystogenous tissue at the pharyngeal orifice; oedema of the tubal prominence during congestion of the vena cava superior; cicatricial formations in the naso-pharynx and ostium pharyngeum; hypertrophic thickening of the soft palate; insufficiency of the palato-tubal muscles in congenital acquired fissure of the palate, and in cleft palate closure of the ostium pharyngeum by new growths in the naso-pharynx, such as naso-pharyngeal polypi; large cysts; cicatricial bands; hyperplastic pharyngeal tonsils; great swelling of the lower nasal-cartilage, or great hypertrophy of the palative tonsils.

Lack of space forbids further quotations. The elegant mechanical execution of the volume harmonizes with its contents, and does honor to the famed Riverside Press.

A Practical Manual of the Diseases of Children, by Edward Ellis, M. D. Third Edition. Cloth: pages, 214; 1879. William Wood & Co., N. Y.

A short time since we had occasion to have a volume of *Medical Journals* bound, and the charge was $1.25. Yet in the volume before us we have equally as good binding and over two hundred pages of printing, including paper, all for $1.00; in short, an octavo volume, contents and all, is furnished at a less price than we could get a similar volume bound. In speaking of the first issue of this series we used an expression to the effect that the mechanical part of the work was of the cheapest style. Since then we have learned that the particular copy received by us was imperfect, and that these imperfections gave it the appearance which we designated as above. The volume before us has none of these defects, so that while it is still true that the mechanical execution is less elegant than that of Ziemssen's Cyclopædia, it is equally true that few works are issued from the medical press so well executed in every respect as "Ellis on Diseases of Children." The fact that it is issued as a third edition establishes its claim to the respect and confidence of the profession.

In our examination of the book we have been struck with several features. First, it is more cosmopolitan than a foreign work is apt to be—European, American and Australian workers are all respected. Second, the cast of the book is essentially modern, based upon the latest scientific researches and clinical studies. Thirdly, it is eminently practical, in the briefest manner indicating the easiest methods of making a correct diagnosis and of applying the most judicious treatment. Fourthly, novelties in treatment are only introduced as the author was able to substantiate their claims from personal observation. Lastly, a formulary and dietary is appended, giving the fullest details respecting the special forms in which the several remedies may best be exhibited. This feature will specially commend itself to the young practitioner. In speaking of the medical examination of children, the author directs attention first, to the *expression* of the *countenance.* (a) The *upper* portion of the face is affected chiefly in brain diseases, causing knitted brow, contracted forehead, and rolling, fixed or purposeless eyes. (b) The *middle* portions of the face are changed in heart and lung affections, the nostrils are sharp or distended or working, and there is a bluish circle round the mouth and dark rings under the eyes. (c) The lower portion of the face suffers mainly in abdominal troubles—the cheeks are changed in color, sunken, puckered, the mouth drawn, the lips livid or pale.

Gestures also are significant, as by them alone cerebral, abdominal or thoracic diseases may be presumptively separated from one another. The *cry* is also important; it is labored, as if half suffocated—or better, as if a door were shut between the child and the hearer—in pneumonia and capillary bronchitis; it is hoarse in croup, brassy and metallic, with crowing inspirations; in cerebral disease, especially hydrocephalus, it is sharp, shrill and solitary, whereas in marasmus and tuberculous peritonitis it is moaning and wailing. Obstinate, long continued crying, lasting for hours, is referable to either earache or hunger. A moderate and rather peevish cry, attendant on suppressed cough, dry and low in character, is indicative of pneumonia. A louder, shriller cry, also, on coughing, as produced in moving the child, is pleuritic. A cry accompanied with wriggling and writhing, and preceding defecation, is intestinal.

We were pleased to notice the special attention given to exposure to light as one of the elements in the child's best nutrition.

Only a few lines are devoted to otorrhœa, but this is so suggestive as almost of necessity to compel the reader to refer to special works on diseases of the ear. Thus: "Earache, discharges from the ears and deafness are symptoms always requiring attention, lest the brain should become affected. Sudden cessation of the discharge is often the immediate prodroma of such an occurrence."

He does not say that all troubles of the ear in children should be carefully examined and treated at once, thus effectually preventing the occurrence of those chronic discharges of the ear, and what is still better, while preventing any possible implication of the brain, saving the sense of hearing intact. Diseases of the ear should be treated promptly, and if thus treated the results will compare favorably with the results from the treatment of any other class of affections.

The diseases of the eye are disposed of in a very brief space, still it is doubtless best to refer the reader to works treating exclusively of this subject.

There are no pages or topics in the entire volume that will not amply repay the most attentive study. The author's style is singularly lucid and attractive. This, combined with excellent thought and correct facts all well printed on good paper, makes a volume of great value to every practitioner of medicine.

ELEMENTS OF COMPARATIVE ANATOMY, by Carl Gegenbaur, Professor of Anatomy and Director of the Anatomical Institute at Heidelberg. Translated by F. Jeffrey Bell, B. A., and E. Ray Lankester. M. A., F. R. S. Cloth: pages, 635; 1878. London: MacMillan & Co. Price, $7.00.

As we read this elegant volume a feeling of regret came upon us that in our early student days such a work was not at our disposal. Its subject matter is immense, and as the author states, only the elements of the study are to be found within these pages. The translation is made in capital English.

In the text the doctrine of evolution appears as the living, moving investment of the dry bones of anatomical fact. Not only is the student taught thus to retain and accumulate his facts in relation to definite problems which are actually exercising the ingenuity of investigators, but he is encouraged, and to a certain extent trained in the healthy use of his speculative faculties. In fact, one great method by which new knowledge is attained—the method of observation of experiment directed by speculation—becomes the conscious and distinctive characteristic of his mental activity."

Thus this work is intended to develope what is called common sense into the more precisely fixed "scientific habit" of mind. The volume is divided into two parts, one treating of the structure of the several parts of the body in general, and one treating of the structure of the several classes of animals that make up the animal kingdom. Three hundred and fifty-five wood cuts illustrate the text. The style of the latter is, for a scientific book, singularly readable. Of its kind we know of no work equal to this one, and it is all the more valuable from the superior manner in which it is issued by the publishers.

TOTAL ABSTINENCE. A Course of Addresses by B. W. Richardson, M.D., F. R. S., L. L. D., F. S. A. Paper: pages, 120; 1878. London: MacMillan & Co. Price, 50 cents.

These are not ranting discourses, but thoughtful presentations of the subject matter by one of the best students in the medical profession. Though in the main intended for a popular audience, they are none the less interesting to a scientific one. The first address treats of the practice of "Total Abstinence in Health and Disease." All the others discuss the several difficulties in the way of total abstinence from alcohol. One may not always be willing to admit the author's premises or accept his conclusions, but he must admire the capable, honest, earnest conviction that gives weight to every sentence. The phenomena induced by the use of the alcohols he divides into four stages—a first stage of excitement—a second stage of excitement with some failure of muscular direction and some mental confusion—a third stage of distinct muscular failure both in direction and power with much mental confusion—and a fourth stage of complete muscular failure both in direction and power, with entire mental insensibility. Of the phenomena attending each of these stages every student of medicine is familiar. All admit that the last three stages are injurious. But the author presents evidence to prove that the first stage is injurious, and that the persons using alcohol no more than to produce it are unwise as compared with those who totally abstain. We have not space to adduce the argument entire. In answer to the accusation that total abstainers are persons of melancholy mood and that their firesides are cheerless and all but inhospitable, he says: "For a month at a time I have sat at the tables of hospitable strangers, changing residence often daily, and meeting large parties each time at which all form of alcoholic drink was excluded. It is the result of my observation that at all of these parties less food was taken, less luxury of every kind indulged in, much less amount of fluid imbibed, and in return more genial mirth and more steady happiness displayed than among any other companionship in which I have moved. It is quite true that mirth is less extravagant at such tables and more chaste, that disputation on subjects which excite keenest dispute —such as politics—is less intense, dogmatic and quarrelsome; it is quite true that passion is more subdued. But these refinements are soon found to be the completest practical attainment of happiness and worth all the rest.

Abstracts from Exchanges.

Practical Medicine.

NEPHRITIS CHRONIC, AS MODIFIED BY DIET, REST, EXERCISE, ETC.—Dr. E. L. Sparks (*Brit. Med. Jour.* Jan. 18, 1879,) reports some very carefully made observations on a case of chronic phthisis with albuminuria with severe inter-current exacerbation. He shows the relations of quantity of urine, albumen and urea to one another, in this patient on ordinary mixed diet with ordinary exercise. He then gives the results of experiments with absolute milk diet, non-nitrogeneous diet, excess of eggs and nitrogeneous diet with water, respectively; also experiments on the effect of rest, and of exercise, and of the administration of digitalis upon the amount of albumen and urea, and on the specific gravity and total amount of urine.

The conclusion deduced from these observations are briefly: (1) The amount of albumen was reduced by absolute milk diet and by non-nitrogeneous diet. (2) The effect of the milk diet was not merely apparent and due to the albumen being more than ordinarily diluted, for ordinary diet with an equal amount of water did not produce the same result. (3) Eggs, in excess, did not appreciably reduce the amount of albumen. (4) The effect of a non-nitrogeneous diet was decided; the effect was not immediately produced, and it persisted some time after nitrogen was re-ingested. (5) Absolute rest remarkably reduced the amount of albumen. (6) Increase of arterial pressure by digitalis possibly increased the excretion of albumen.

MYOCARDITIS—ITS DIAGNOSIS AND TREATMENT.—Dr. H. Ruhle (*Deut. Arch. für Klin. Med.*, *Brit. Med. Jour.*, Jan. 18, 1879), reports several cases in which he diagnosed diffuse chronic myocarditis and verified his opinion by a post mortem examination.

The patients present the symptoms of an uncompensated valvular disease; the left ventricle cannot do its work and the pressure rises in the venous system. Accordingly we meet with œdema, hyperæmia and hæmorrhages in different organs, dyspnœa, digestive troubles and decrease of urine. The dullness of the heart is enlarged, especially towards the left. The apex beat can be felt at first, but it is very irregular as to strength and disappears altogether at a later period. The sounds of the heart are clear, but the first is generally indistinct and the second over the aorta very weak. A systolic murmur is often heard at the apex of the heart, but its sounds are quite irregular in strength and succession. The pulse beats corresponding to the heart are irregular and unequal—a characteristic symptom.

The prognosis of the disease is always unfavorable, and more so if the diuresis be sparing.

Ruhle's treatment is as follows: During the first stage the patient must be kept quiet, eat milk food, apply ice to the region of the heart, take iodide of potassium and eventually digitalis. During the second stage the patient is treated with digitalis and stimulants. Still Ruhle never succeeded in making the pulse regular.

SCIATICA AND VIOLENT NEURALGIA CURED BY HYPODERMIC INJECTIONS OF ETHER.—C. G. Comegys, M. D., writes to the *Cin. Lancet and Clinic*, Jan. 4, 1879, that he has recently had further tests of the treatment of sciatica and neuralgia by hypodermic injections of ether.

An injection of thirty drops repeated twice at intervals of twelve hours cured a violent neuralgia of the branch of the circumflex nerve of the right shoulder which accompanies the long head of the biceps into the joint. Constitutional treatment in this case did but little good and did not cure, while the ether seems to have produced almost immediate relief.

The Doctor concludes that "it may now be considered as a settled fact that the use of ether hypodermically is a safe, speedy and certain relief for sciatica, ticdouloureux, coccyodynia and allied local neuralgias."

TREATMENT OF DIPHTHERIA.—Dr. Louis Weigert says (*Hosp. Gazette*, Jan. 16, 1879,) "I firmly believe and confidently assert that death from diphtheria need hereafter be of but rare occurrence."

His treatment consists in the administration of mercury, bringing the patient well under its influence during the first forty-eight hours of its use, and the inhalation of the fumes from black oxide of mercury.

He enumerates several cases illustrative of this treatment, one of which is appended:

R. I., aet. 3 yrs., Sept. 15th, 5 p. m. Complained last night of sore throat and head ache. Temp., in axilla, 103°, pulse 140, tongue coated, diphtheritic odor strongly marked, both tonsils well covered with membrane. Ordered cold applications to neck, powders containing calomel gr.j and Dover's powder gr.j to be taken every hour, and to inhale the fumes of black oxide of mercury (gr.x) every two hours. At eight the following morning the temp. was reduced to 99° and the second morning to 98½°. On the third day the membrane had nearly disappeared and on the seventh day the child was discharged cured.

CONVULSIONS CAUSED BY CONSTRICTION OF THE GLANS PENIS.—Dr. A. R. Mott, Jr., house surgeon of Workhouse Hospital, New York, reports the following unique case (*Hosp. Gazette*, Jan. 9, 1879) :

John English, native of England, clerk, aet. 46, admitted to hospital Dec. 23, 1878. Had fallen from his bunk in a convulsion, was semi-conscious, showed no signs of injury. Pulse, 120;

temp., 102. Respirations normal, pupils slightly contracted, showed no annoyance on being disturbed. Had several convulsions, passed urine and fæces in bed and continued in stupor until the evening of Dec. 25, 1878. Accidentally it was discovered that the glans penis was swollen and a piece of twine was found tied twice around the penis posterior to the corona glandis, but not tightly enough to prevent the flow of urine. The string was removed, and in half an hour the patient asked for some water which he drank saying he felt perfectly well. Up to the 28th no more convulsions had occurred and he was discharged cured.

The diagnosis was convulsions due to an irritation acting reflexly. Dr. Mott adds: "The case seems to add strength to the theory of those who believe in the potency of a constricted meatus urinarius to produce intense nervous disturbance, and to justify the operation for its enlargement."

YELLOW FEVER DEPENDENT UPON WATER SUPPLY.—Dr. B. B. Williams *(Med. Brief*, Jan., 1879), advocates the theory that the use of standing water, as from wells and cisterns, is necessary to the production of yellow fever epidemics.

He says standing water absorbs, to a certain extent, the poison from the atmosphere, which passes into the system through the stomach when the water is drunk.

He points to the immunity of New York and Philadelphia, ascribing it to the fact that their water is obtained from a distance and delivered through pipes, and says if New Orleans would obtain her water from the muddy Mississippi and distribute it through service pipes, all further danger of yellow fever epidemics would be obviated.

DIABETES MELLITUS.—The *Canadian Lancet* for January reports two cases of diabetes mellitus cured by the use of extract of nux vomica. They are spoken of on the authority of Dr. Esy Tarzana, of the *Gazette Medica de Roma.* At first, three-quarters of a grain of the alcoholic extract of nux vomica dissolved in three ozs. of distilled water were given daily, and this dose was increased by three-quarters of a grain every three days un physiological effects manifested themselves or the diabetic symptoms diminished.

VACCINE VIRUS *vs.* ARSENIC.—(*Canadian Lancet*, Jan., 1879.) Vaccination will not prove successful in a patient who, at the time, is under the influence of arsenic, says an English health officer, Dr. E. J. Tyson, quoted by Dr. E. M. Hunt, *Med. Record*, Nov. 9th. He suggests that other remedial agents, especially those classed as azymotics, will also cause the failure of a properly performed vaccination. This hint opens the door to a wide field of investigation.

DESQUAMATION OF THE EPIDERMIS.—(*L'Union Médicale*, Dec. 24, 1878.) M. Charrier reported the following unique case to the Society of Medicine, of Paris: On July 9, 1878, I was called to attend a lady in her second confinement. Her health during her pregnancy had been very good with the exception of a slight attack of bronchitis. During this time not a case of eruptive fever had been observed in the neighborhood, and there was no question of syphilis in father or mother. The child was born in a semi-asphyxiated condition, pale as wax, and it was only after several minutes that it uttered its first cry. The cord was flattened like a ribbon, of a greenish-red tint, 83 centimetres long, and appeared to belong to a still-born fœtus, long macerated in the amniotic waters. The epidermis of the child fell off in large flakes on the slightest friction and that of the feet came away like a glove, as if the fœtus had been dead and macerated for six or eight days. The next day the epidermis had all fallen and the child then had the normal color and temperature; He took nourishment well and his health has since been very good. I have certainly never seen nor heard of anything similar, and now arises a question of medical jurisprudence, can the fœtus then, *before death*, be macerated in the amniotic waters?

CHLORAL AS A COUNTER-IRRITANT.—(*Bull. Therapeutique*, *Atlanta Med. and Surg. Jour.*, Jan., 1879.) Chloral made into a mass with gum tragacanth, spread on paper and applied to the ill produce a blister without pain. Applied as a powder on cotton, it causes a painful burning sensation. By the former method, a portion is absorbed and the patient falls asleep. Its action is not so uniform as cantharides, but is a mild vesicant, or an agreeable revulsive. The author commends such "choral-paper" to physicians, the more so as it will keep for months without losing its activity, if well prepared.

CLIMATE—ITS RELATIONS TO HEALTH.—Dr. F. C. Schæfer (*Chicago Medical Journal*, Feb., 1879), concludes a somewhat extended study of the above subject as follows: "The most healthful climate, as a rule, combines the following qualities: Equable temperature, moderately warm or cold; moderate dryness; an abundance of sunshine; strong electric tension and considerable free ozone; sufficient winds to assist in removing impurities; contour of land and nature of soil favorable for prompt drainage; moderate rain falls; the presence of bodies of water and proximity to forests. For a limited class of special diseases, we find strongly recommended: high altitude; warm or cold temperature; sea air; moderate humidity. Points regarded as universally injurious are: decided humidity; lowness of lands, especially if the soil is marshy or of a clayey nature."

POULTICES—THEIR MODE OF ACTION, AND THE PROPER METHOD OF APPLYING THEM.—Dr. T. Lauder Brunton (*The Brain*), says that the effect of poultices is probably different from that of blisters, although utimately productive of similar relief. Thus, a finger inflamed by a thorn run into it, may be relieved by putting the hand into cold water, or the finger into a warm poultice. By either of these measures, we lessen the blood pressure in the vessels where stasis has already taken place. The cold applied to the hand causes the arteries to contract, and thus shuts off the supply of blood to the inflamed part, and lessens the pressure in the blocked capillaries. The warm poultice dilates the vessels around the point of stasis, and affords the blood a ready exit into the veins, thus diminishing the blood pressure in the inflamed part. In the case of internal organs, the blister applied to the skin probably acts like the cold applied to the finger, while the warm poultice placed on the surface of the thorax or abdomen, affects the deeper lying organs in the same way as it does the superficial ones, the warmth penetrating through the thin thoracic or abdominal parietes. To produce this effect, poultices should be made as follows: Take a flannel bag, the size of the poultice required, fill this with the linseed poultice as hot as can be possibly made, and put between this and the skin a second piece of flannel, so that there shall be at least two thicknesses of flannel between the skin and the poultice itself. Above the poultice place more flannel or a piece of cotton wool to prevent it from getting cold. The heat of the poultice, thus applied, gradually diffuses through the flannel, and affords a grateful sense of relief unattainable by other means.

Nervous Diseases.

NERVOUS EXHAUSTION—ITS PRINCIPAL PHENOMENA.—Dr. J. S. Jewell (*Journal Nervous Diseases*, Jan., '79), gives the characteristic phenomena of neurasthenia, as follows: (1.) Exalted physiological sensibility, general and special, including reflex excitability. (2.) Permanent lack of nervous power, including power of inhibition. (3.) Beneath all this impaired nutrition, in which there is a more or less permanent preponderance of waste over repair, especially in the nervous structures of the body. (4.) Exalted emotional susceptibility and mobility, especially in the direction of depression. (5.) Loss of will power or power of control, and in general, not of mental *sensibility*, but of mental power to do or endure within the sphere of mental life and action. (6.) Underlying all of which are combined nutritional and circulatory lesions, especially of the brain, which impair the substance, diminish and render unsteady the exercise of the power of the brain, and finally, exalt its sensibility.

CEREBRAL LOCALIZATION—MORE CLINICAL EVIDENCE.—Dr. U. Palmerini (*The Brain*, Oct., '78), reports in detail three cases of softening of the brain in the left hemisphere, affecting the ascending frontal convolution. These cases were carefully observed, ante and post mortem. The doctor, from their study, deduces the following: (1.) In the frontal ascending or marginal anterior convolution exist *psycho-motor* centres, which exert a manifest influence upon the voluntary movements of entire groups of the muscles of the opposite side. (2.) These centres correspond in man to the sites indicated by Hitzig, Ferrier and Albertoni. Lesion of these points produces persistent but incomplete paralysis, susceptible of marked exacerbation and diminution. (3.) This particular form of progress of symptoms and the permanence of incomplete paralysis, particularly when preceded by exacerbation and diminution, are two clinical characters of the utmost importance. (4.) The constancy of motor lesions consisting always in phænomena of paralysis and of ataxy, shows that the nature of these centres is motor and not sensory.

Further clinical evidence is adduced by Dr. Maragliano (*Brain*, Oct., '78). He has collected ninety-seven cases of cerebral lesions with a view to observe the correspondence of symptoms during life with the parts of the brain injured. He finds that this correspondence agrees in a wonderful manner with the observations of Ferrier. His conclusions are as follows: (1.) Alterations in the cortex of the cerebrum may cause alterations in the motor functions of the body. (2.) This influence comes exclusively from the frontal and parietal lobes. (3.) Lesions of the frontal convolutions are more frequent than those of the parietal. (4.) In the frontal lobe, the faculty of influencing the motor functions is confined to the ascending frontal, and to the posterior part of the first, second and third frontal. (5.) Of all the frontal convolutions, the ascending gyrus is oftenest injured. (6). In the parietal lobe, the faculty influencing the motor functions resides especially in the ascending parietal. (7.) Lesions are found in the two ascending or median gyri in equal proportions. (8.) In the motor derangements confined to the upper extremity, the lesion may be found in the upper two-thirds of the motor zone. (9.) The motor derangements of both limbs correspond to lesions in the upper two-thirds of the two ascending or median gyri. (10.) When pronounced disturbances of the muscles the eye are associated with motor derangements of one or both limbs, we constantly find a lesion in the inferior lobe of the ascending frontal gyrus. (11.) Motor derangements of the superior palpebral muscle seem to correspond with lesions of the inferior parietal gyrus. (12.) The phenomena of excitation, cramps, convulsions and other epileptiform attacks, correspond indistinctly to alterations in the ascending frontal and parietal convolutions, and to points immediately contiguous.

Physiology.

EPIGLOTTIS—ITS FUNCTION IN DEGLUTION AND PHONATION. —Dr. Walton (*Journal of Physiology*, vol. 1), gives a capital paper on the functions of the epiglottis. Experiments on animals and man, with extensive literary researches form the basis for the following conclusions: As regards deglutition, (1.) The epiglottis can be removed from dogs and cats without interfering with deglution. (2.) The cases commonly quoted to prove the connection between the epiglottis and the deglutition of fluids prove nothing; not a single case having been found, after a careful search through the reports of laryngoscopic observations, in which the lesion is shown to be limited to the epiglottis where liquids are reported as causing a cough on deglutition. (3.) There are many cases in which loss of the epiglottis has not been followed by difficulty in swallowing liquids. (4.) In failure of the glottis to close, the epiglottis, if uninjured, is able to protect the larynx; but in the normal condition the presence of the epiglottis is not essential to perfect deglutition. It is, therefore, only an additional safe-guard.

Regarding phonation: (1.) The epiglottis produces change in pitch, acting as a sounding plate by means of its free edges, and as a tuner in modifying the pitch as it presses back over the glottis or the opposite. (2.) The epiglottis produces *changes in quality*. (a.) If a brilliant tone be intended, the free edge only he epiglottis is turned up. (b.) If a sombre tone be intended, llowed by the tongue pushes back over the glottis, so as to deaden the sound by obstructing it instead of reinforcing it, as it does in the brilliant tone. (c.) If a veiled tone be intended, the epiglottis flattens towards the tongue, so that its whole posterior surface is in view. The same positions are taken by the epiglottis for each of the vowel sounds. (3.) The epiglottis produces *changes in intensity*, acting like a valve at the top of an organ pipe, if the note of the reed is intended to be swelled. In acting so, it must, of course, be drawn over the larynx, the ventricular being simultaneously drawn.

ACTION OF THE CERVICAL SYMPATHETIC UPON THE PRESSURE OF THE BLOOD AND RAPIDITY OF THE CIRCULATION.—*(Lyon Medical Journal*, Jan. 12, 1879,) from the communication of M. Morat & Dastre to the Academy of Science, at Paris, we take this resumé of their experiments:

The animals employed were horses, asses and mules. Sometimes the pressure was taken at the same moment in the facial artery and vein; on other occasions, the pressure and rapidity of the circulation in the carotid were measured simultaneously.

Effects of Section.—A transient rise of pressure continuing for four or five seconds, takes place simultaneously in the artery and vein. After this, a very marked lowering of the arterial, and a corresponding elevation of the venous pressure manifest themselves during several days.

Effects of Excitation.—Arterial pressure gradually rises, while venous pressure diminishes; the latter, however, does not take place immediately like the former, but is preceded by a slight rise of short duration. The arterial pressure rises gradually, and reaches a maximum which is never maintained for more than twenty or thirty seconds, whatever may be the intensity or duration, even, of the exciting current. Soon the pressure gradually falls to below the original point; remains there for two or three minutes, after which, it returns more or less exactly to the first degree. The results obtained by studying in the carotid, the rapidity and pressure simultaneously agreed with what precedes.

To this point, the results coincide with that which theory predicted. The unforeseen result obtained, however, is the original constriction due to the excitation is always followed by an inverse modification—by a dilatation greater than that determined by section of the sympathetic. This *hyperdixatation* is remarkable for its long duration. Thus, the anæmia provoked by excitation of the sympathetic, lasts but for a short time, and gives way to a much greater congestion. We accordingly see here a series of opposite effects, remarkable for its constancy; reaction succeeding action, or rather, a phase of alteration after a period of exaggeration of the function of the nerve. This is a constant physiological law. Although it is not impossible that the sympathetic trunk may contain a certain number of dilator fibres, together with the constrictor, the latter, however, predominating, nothing proves that these two consecutive phenomena of constriction and dilatation need, as a cause, the activity of two different species of fibres excited at the same moment.

Pathology.

SEPTICÆMIA—ITS MODE OF OPERATING.—M. Colui, (*Bulletin Academy of Medicine*, Cond. Med. Record, Jan., '79), gives an account of some very important recent investigations. From this, it seems quite evident that "putrid material, according to its quantity and degree of alteration, exerts a variable action on the animal organism. In a large dose, it determines a rapid and invariably fatal poisoning, which causes no marked alteration in the blood beyond a tendency to incoagulability, and is not associated with the reproduction of proto-organisms. In cases of this kind, the injected fluid fails to communicate any kind of virulent property, either to the blood or any other juice in the economy. In reduced quantity, the animal fluid gives rise to an adynamic febrile state, which varies in intensity according to the nature of the animal. If this condition proves fatal, it is so through the production of visceral lesions and through changes in the blood. Reproduction of proto- nisms takes place at least in those parts where the en deposited, and frequently throughout the whole mass of the blood. Certain putrid fluids that have not undergone much alteration, such as blood mixed with the products of intestinal transudation; decomposing blood of an animal affected with charbon; peritoneal serosity, removed sometime after death, may alone, when injected in extremely minute quantities, determine septicæmia, transmissible by inoculation, after the manner of the majority of virulent affections. Here there is always virulence of the fluid and reproduction of the proto-organisms introduced from without.

TETANUS—ITS PATHOLOGY.—The pathology of tetanus is very obscure, and any aid in its elucidation is cordially welcomed.

Dr. G. A. Woods, (*Lond. Lancet*, Jan., '79), reports one case, most carefully studied by himself, and collects the results of eighty-one cases from other observers. From this mass of facts, he concludes that tetanus is a disease which may be produced by several causes. Either cause may lead to the following changes: (1.) Enormous dilatation of blood-vessels in the medulla, particularly in the neighborhood of the hypoglossal and pneumogastric nuclei, and in the spinal cord, especially around the central canal and the portion nearest the seat of injury—the part in which colloid bodies are usually noticeable. (2.) Leucocytal infiltration in the same regions, much more uniformly distributed than in hydrophobia. (3.) Granular and subsequent changes, the result of malnutrition, most noticeable in the posterior columns, and varying according to disease duration. (a.) This condition is associated with an exalted action of the ganglionic cells originating in a point of the cord nearest the seat of the injury, and extending upwards towards the medulla—the central seat of bilateral reflex action. (b.) The blood destined to supply the rapid ganglionic metamorphosis in the medulla, is altered either in quantity and quality, or in both. (c.) The ganglionic cells of the medulla not receiving their proper blood nutriment in proper quantity or quality, can no longer supply that nutritive force which is so necessary for the proper and healthy performance and maintenance of its vital functions.

Action of Medicines.

BILIARY SECRETION OF DOG AS MODIFIED BY VARIOUS MEDICINES.—Dr. W. Rutherford *(Brit. Med. Jour.)* has been experimentally investigating the action of a variety of remedies with the following results:

Sodium Bi-carbonate was found to be an exceedingly feeble hepatic stimulant even in large doses. From this it may be inferred that the ordinary dose of ten or twenty grains given to the human subject produces no appreciable influence on his bile secretion. With *potassium bi-carbonate,* a similar result was attained.

Potassium Iodide was shown to have no effect upon the biliary secretion.

Manganese Sulphate acts on the biliary secretion as magnesiumsulphate or any other intestinal stimulant, viz., it diminishes the biliary secretion by draining the portal system.

Benzoates of Sodium and Ammonium are powerful stimulants of the liver, but not of the intestinal glands. It would seem from this that these substances were indicated in hepatic congestion and other affections of the liver, especially if their administration were followed by the administration of an intestinal stimulant, as magnesium sulphate.

Sodium Salicylate was found to be a powerful hepatic stimulant.

Sodium Chloride was only a feeble hepatic stimulant.

Morphia Acetate did not affect the secretion of bile.

Hyosciamus did not notably affect the biliary secretion, nor did it prevent other hepatic stimulants from augmenting it. Thus it can probably be safely given with all hepatic stimulants that are also intestinal stimulants to prevent griping.

Pure Alcohol has no immediate influence on the biliary secretion.

Jaborandi is to be regarded as a very feeble hepatic stimulant.

Obstetrics.

IMPORTANCE OF ABDOMINAL MUSCLES IN PARTURITION.—The important part which the abdominal muscles bear in parturition is well exemplified by a case reported by Dr. E. J. Ill, of Newark, N. J., in *N. Y. Med. and Surg. Brief*, Jan., 1879:

The patient was attended by a midwife during the first stages of her labor. During a protracted pain there was a tearing sensation after which no forcible expulsive efforts could be made.

When the doctor arrived the patient had been in labor eight hours. He found the head presenting in the first position, high up in the pelvis, the vertex directed towards the sacrum. The different parts of the child could be felt very plainly through the abdominal walls. He delivered with the forceps, when, by combined external and internal palpation, he found the recti had separated at the linea alba for four inches above and three inches below the umbilicus.

Eighteen months later he attended the woman in her next confinement (the fourth). He found her in the same condition as when called the first time, the uterine contractions being insufficient to even force the child into the inlet of the pelvis. He again delivered with forceps without difficulty.

SEX OF THE CHILD AS RELATED TO THE AGE OF THE MOTHER.—Bidder (*Brit. Med. Jour.*, Jan. 25, 1879,) has reported the results of his observations on this subject. In 4,441 primiparæ the proportion was 100 female to 111.5 male children. Very young primiparæ gave birth to a large proportion of boys; those of twenty or twenty-one years old had more girls than boys; while as age increased the proportion of male children again rose. In 7,430 multiparæ there were 100 female to 112.4 male children. The proportion of males exceeded that of females in those aged from seventeen to twenty-one. The number sank in the twenty-second and twenty-third years, reached its minimum at the ages of twenty-four and twenty-five, and then again increased in proportion to the age of the mother.

Diseases of Women.

IMMEDIATE UTERO-OVARIAN AMPUTATION FOLLOWING CÆSARIAN SECTION.—The large majority of operations of Cæsarian section performed in large cities result in death ; any procedure which reduces this ratio of mortality is worthy of serious consideration. An editorial of the *Lyon Medicale* of January 5, 1879, calls attention, from this point of view, to an operation first performed by Prof. Porro, of Pavia, on May 21, 1875, in which he amputated the uterus and ovaries of a woman who had just undergone Cæsarian section. This desperate measure was put into execution as the only probable means of saving the woman's life from the dreadful hemorrhage which resulted from the incision of the uterus. Although the patient was in the maternity hospital of the city, where, at the time, an epidemic of puerperal fever was raging, still she so fully recovered that after six weeks she was sufficiently strong to stand the fatigue of a journey of several hours' duration.

The operation is carried out after the manner of an ordinary Cæsarian section until the uterus is laid open; but, this being done, instead of immediately detaching the placenta, the womb is lifted out of the cavity through the abdominal wound, and held in position by strong traction, whilst the borders of the abdominal incision are firmly pressed by assistants against the uterine neck. The after-birth is taken away only when, by these precautions, the entrance of blood into the peritoneal cavity is prevented. The pedicle of the tumor formed by the uterus and its annexes is constricted by the linear ecraseur until the circulation is checked, and then with a bistoury the surgeon cuts away the mass to within two centimetres of the chain of the instrument. The stump is then transfixed by a long needle, to prevent its retraction within the abdomen, and the edges of the abdominal wound are brought together with sutures. The portion of the stump beyond the chain comes away after several days, and the remainder becomes adherent to the abdominal walls, and cicatrisation is complete in a month or six weeks.

This operation removes three of the principal sources of the danger of Cæsarian section. On the one hand, the hemorrhage which follows the latter, coming either from the lips of the uterine wound or from the surface of the placental insertion, and which but too often resists all the efforts of the surgeon, is prevented; on the other, the possibility of entrance into the peritoneal cavity of blood, amniotic fluid and the lochia, which all precautions could not formerly prevent is thus removed. Again, the inflammatory process necessary for repair in Cæsarian section has its first origin in the uterus, and thence extends to the whole peritoneum, while in the operation spoken of the organ is removed. The necessity of taking away with the uterus the entire system of utero-ovarian vessels, and the benefit of guarding the woman against the periodical congestions which the ovaries would cause, led Porro to amputate at the same time the uterus, ovaries and broad ligaments.

Since May 21, 1875, this operation has been performed fifteen times; there have been seven recoveries and eight deaths. This result is still not very encouraging; but, if compared with that obtained by the old method, Porro's operation must be considered as an important progress.

TREATMENT OF CHRONIC CERVICAL METRITIS.—(*Dublin Jour. Med. Science—Toledo Med. and Surg. Jour.*)—Dr. J. M. Bennett, of Liverpool, treats this disease by injecting the cervix with iodine by means of a long-pointed hypodermic syringe. The solution is composed of iodide and bromide of pot. each 20 gr., tr. iodine ½ drachm, water 2 drachms. Three or more punctures are made, according to the amount of hyperplastic tissue to be absorbed. Three operations are generally sufficient. He has never known it to cause any disturbance, while it has effected many cures, after other methods had failed.

NEW METHOD OF DETERMINING THE EXTENT OF THE ATTACHMENT OF UTERINE FIBROIDS.—Dr. T. G. Thomas (*Medical Record*, Feb. 8, 1879), says that after resorting to all known instruments for the determination of the exact location and extent of the attachments of uterine fibroids, he fixed upon the use of the *flat whale-bone sound.* In its use the index finger of the left hand is placed against its most accessible part; then the sound is passed up along the side of the tumor until it became arrested. The sound being then withdrawn, and the finger kept upon it, it is laid upon a sheet of paper, and being curved, a line is drawn from its tip to the indicating finger. The same was done upon the opposite side of the tumor, and in that way an approximate and wonderfully exact idea could be obtained with reference to the situation and extent of the attachment.

FIBROIDS OF UTERUS—NEW METHOD OF THEIR REMOVAL. —Dr. T. G. Thomas (*Medical Record*, Feb. 8), after presenting the objections to the methods now in use for the removal of uterine fibroids, adduces a new method, which he regards as superior to excision, torsion, avulsion, ecrasement, enucleation and ergot. The new method consists in seizing the most dependent and accessible part of the tumor with a strong vulsellum forceps, passing along its sides the *serrated scoop* or *spoon-saw*, and by a gentle pendulum motion from side to side, sawing through the attachments of the tumor and forcing it entirely from its connection with the uterus.

The advantages claimed for the instrument are: (1.) Greatly limited hemorrhage from the use of the saw. (2.) The shape of the spoon-saw causes it to follow of itself the contour of the tumor, and, at the same time, protect the uterine tissue. (3.) The highest attachment can be reached as well as the lowest. (4.) The saw action secures separation with rapidity and with certainty. (5.) The spoon-saw separation of the growth at the highest point of attachment, leaves no peduncle to decompose.

To illustrate these advantages, a number of cases were reported operated upon by old methods, and an equal number operated upon by the new.

So sanguine is Dr. Thomas of the value of this method, that he unhesitatingly recommends it in place of all other methods for the removal of sub-mucous and interstitial fibroids. In any case in which the vulsellum forceps could be fixed in a fibrous tumor, small enough to be delivered by the vagina, detachment of it could always be thus accomplished.

Surgery.

ACUTE GLOSSITIS.—Worthington Myers, A. M., M. D., (*Cincinnati Lancet and Clinic*, Jan. 4, 1879), reports six cases of acute glossitis, treated by free incision of the dorsum of the tongue, or by leeches. While gleneral blood-letting seemed to do but little good, blood taken locally relieved in one to two hours time. In some of these cases, the supervention of urgent symptoms came on as suddenly as four hours from the time of attack.

AMPUTATION AT THE HIP JOINT.—In a letter to the *Lancet and Clinic*, (Jan. 4, 1879), Dr. M. S. French, writing from Philadelphia, details somewhat at length the third operation by Dr. T. G. Morton for amputation at the hip joint. A long anterior and a short posterior flap was made. Hemorrhage was controlled by the abdominal tourniquet. Numerous vessels required at first forty ligatures, and in consequence of oozing from the stump, after fifteen hours the sutures were cut, and ten more ligatures applied, making fifty in all. Two long pins were also used, as affording greater security against secondary as well as primary hemorrhage.

The sutures, which in this case were of silver wire, were removed at the end of seven days after the operation (Dec. 21, 1878), and the case seems to be doing well. All of Dr. Morton's amputations at the hip joint have been successful in every particular so far, though the last patient has not yet fully recovered.

TREATMENT OF UNUNITED FRACTURE.—(*Med. and Surg. Rep.—New Or. Med. and Surg. Jour.*, Jan., 1879.) Mr. Fitzgerald, of Australia, in view of the unsuccessful results attained by the milder and severer remedies commonly used in treating this troublesome accident, strongly advocates the injection of glacial acetic acid, five to ten minims, by means of the hypodermic syringe, between the ununited ends of bone. By means of this method of treatment he has had uniform success. The injection is attended by sharp pain at first, but this quickly subsides. Any cartilaginous thickening that may be present is soon resolved and re-absorbed, and bony union takes place rapidly, apposition of the ends of the bone being secured by well-adapted splints.

TUBERCULAR CYSTITIS.—(*Thesis Guébrard, Lyon Médical,* Jan. 12, 1879.) Post-mortem, the bladder is usually contracted, and the mucous membrane presents variable traces of an acute or chronic inflammation. Granulation or tubercular ulceration are always present. According to the stage of evolution of the granulation it may be gray and semi-transparent, or yellow and opaque. The ulcerations are of variable form and size, generally superficial, involving only the mucous membrane, and are well defined. The color is frequently yellowish. They are usually found in the neighborhood of the neck and bas-fond of the bladder.

The author admits, contrary to many other writers, that the lesions may ascend from the bladder to the kidneys, and do not always follow a descending course from the kidneys to the bladder and urethra.

The symptoms, although not absolutely characteristic, present, however, certain peculiarities which render the diagnosis almost certain, even when tuberculisation of the other organs is not well marked. The usual signs of ordinary cystitis are present: hematuria, dysuria, necessity of frequent urination, and pus in the urine. But one symptom, found almost exclusively in tubercular cystitis, is that the necessity of micturition and the pains are generally more frequent and more intense during the night, whilst usually, in ordinary cystitis, repose in bed ameliorates the patient's sufferings.

For local treatment, opiated injections and instillations in the neighborhood of the neck, of a solution of nitrate of silver of 25 or 50 per cent., are means recommended to afford relief, if not to cure.

SPINAL CURVATURE TREATED BY CONTINUOUS EXTENSION.—Dr. John A. Wyeth (*Med. Record,* Feb. 8, '79), presents a capital modification of the plaster of Paris jacket. The jacket is made in two segments, which come nearly together at the point at which the lesion is situated. The upper section is applied by commencing about one inch above the seat of the disease and passing upwards. The rollers catch upon the expansion of the thorax from below upward, and also upon the muscles of the axillæ and the scapular prominences. Then, beginning from just below the seat of injury, another jacket is applied, perfectly independent of the upper one, and extended downwards until it catches upon the expansion of the ilium upon both sides. Into each jacket, while it is being applied, are fastened zinc plates perforated from both sides, so that the little spiculæ became entangled in the plaster, and are thus rendered practically immovable. In the centre of each zinc plate a strong iron staple is fastened; three of these plates are fastened into each jacket, at opposite points above and below the seat of the lesion, one upon each side of the trunk, and a third over the spine. To the staples in the zinc plates extension bars are fastened, being so constructed that they can be shortened or lengthened by means of a key. With this apparatus *fixation* and extension can be maintained constantly. Whenever the jackets yields, so that fixation is imperfect, a few turns of the key so elongates the bars as to secure perfect rest. It is believed that this apparatus obviates all the objections to each of the other forms of apparatus heretofore employed in these cases.

Otology.

INFLAMMATION OF EXTERNAL AUDITORY MEATUS TREATED BY THE USE OF CALCIUM SULPHIDE.—Dr. Samuel Sexton *(Amer. Jour. Otology*, Jan., 1879,) gives the results of his study of calcium sulphide in treating aural affections for more than two years. He believes with Ringer that it possesses the power of preventing and arresting suppuration.

He administers the drug in nearly all cases in which inflammation of the meatus externus is a symptom in some stage or other of the disease, but especially in those in which suppuration has occurred or threatens to occur. Should there be caries of the bone, periostitis or extensive destruction of the tissue in connection with these affections, the remedy may also be employed. In scrofulous affections this medicine is much praised, and in certain cases improves the general health. Furuncles in the meatus under the use of this medicine are frequently observed to abort and dry up without a discharge of pus. In some instances I rely entirely on this medicine in the treatment of inflammation in the ear; but free incisions are in some instances, of course, not to be omitted, as when the pain is urgent from distention or a collection of pus exists which is too large to be absorbed. Leeches should be resorted to when arterial tension is great and the parts are highly engorged with blood. The prevention of a continuance or a return of furuncles, etc., by this remedy is very clearly possible, provided no remote cause be left active.

TINNITUS AURIUM—ITS VARIOUS FORMS.—Dr. Woakes (*London Lancet*) arranges these as follows :

(1) Labyrinthine congestion, arterial or venous, giving rise to pulsating or rushing noises. (2) Anæmia, aneurism, extra aural causes, with pulsating noises. (3) Fluid in the tympanum or eustachian tubes from catarrh of the middle ear, giving rise to bubbling or gurgling noises. (4) Congestion of the membrana tympani, cavity of the tympanum or eustachian tubes, or all of them together, arising from chronic non-suppurative inflammation of the ear, causing tidal noises. (5) Also by reflex irritation of the tensor tympani nerve from the otic ganglion. All of these may co-exist in the same patient at the same time, or may succeed each other or be variously combined in different stages of the same case.

CEREBRAL SYMPTOMS PRODUCED BY IMPACTED CERUMEN.—Dr. Wm. A. Hammond (*Hospital Gazette*, Jan. 9, 1879,) reports three cases illustrating the degree of cerebral disturbance which may be caused by impacted cerumen.

Case I, age 27, was, when first seen, suffering from vertigo, pain in posterior portion of the head, insomnia, melancholy and hallucinations of hearing; the latter very marked and scarcely ever absent during waking hours. The whisperings which she seemed to hear were of the following import: "You have lost your soul. You have committed the unpardonable sin. You are too vile to live. Go and kill yourself," etc. Frequently there was a repetition of one of these or of others of similar import for hours. She had begun to believe in the reality of the voices, although at first, recognizing that they were only hallucinations.

She had been subjected to treatment consisting of cupping, leeching, blistering, purging, etc., without relief.

Upon examination, both meati were found to be obstructed by plugs of inspissated cerumen. These were softened by introducing a few drops of a solution of sod. bicarb. in glycerine, and the next day they were removed by injections, and the patient kept quiet during the day. On the following morning there was entire freedom from dizziness and the whispering voices seemed further away. Little by little the delusion decreased in reality, and after a few days there was complete recovery.

Case II, age 22, was also suffering from vertigo, pain, deafness, etc. He wore an expression of great anxiety, walked with a staggering gait and was greatly depressed.

Both auditory canals were found plugged. The plugs were removed with warm water, and the symptoms almost immediately disappeared.

Case III, a lawyer, was suffering from vertigo, pain in the head, confusion of ideas, insomnia and hallucinations of hearing. The voices troubled him to such an extent that he was unable to follow his profession. He did not actually believe in their reality, but confessed a gradually increasing inability to disbelieve.

Both ears were found full of inspissated cerumen. This was thoroughly softened by the solution of soda in glycerine and easily removed with warm water. On the instant the voices ceased and there was complete relief of the symptoms.

About two months afterward the man was fined and imprisoned for contempt of court. He had imagined that the judge was calling him hard names and had retorted.

An examination was obtained and the ears found in the same condition as previously. The plugs were again removed and did not re-appear.

Dr. Hammond remarks that "There is nothing new in the fact that impacted cerumen, in one or both ears, is capable of giving rise to notable disturbances of cerebral and nervous action, but the circumstance does not seem to have attracted the attention it deserves, except, perhaps, so far only as the sense of hearing is concerned."

Ophthalmology.

RETINITIS PIGMENTOSA—ITS HEREDITY ILLUSTRATED.—Dr. W. Cheatham (*Trans. Amer. Oph. Society*, 1878,) reports the following remarkable history:

For two hundred years retinitis pigmentosa had attacked about half the members of one family. There has been but one inter-marriage in this family, and the children of this couple are the only ones, all of whom are entirely exempt from the disease. As soon as twilight sets in, the blindness usual in such cases begins, yet, by bright moonlight, some of them are able to read the finest print, but the instant they get into the slighest shade the hemeralopia again appears. The family alluded to is said to be one of the most numerous in the south.

LIGHT AS A REMEDY IN TREATING EYE DISEASE.—Dr. C. R. Agnew (*Trans. Amer. Oph. Society*, 1878), concludes a very instructive paper on the above topic, by stating that from his experience he has learned that day-light should not be excluded from apartments in which ophthalmic cases are being treated. As a rule, the importance of and necessity for the use of light as a remedial agent will be in inverse proportion to the inclination of the patient. We cannot always depend upon the presence of photophobia as an indication for the prolonged use of darkness as a remedy. Photophobia is not usually a very marked symptom in retinal, neural or choroidal cases in which the interrupted use even of darkness as a remedy is demanded so that the ophthalmoscope lesions are more to be depended upon as guides.

As a rule, corneal and iritic affections do not demand the entire or continuous exclusion of light; many cases of these diseases are either aggravated or made hopeless by such exclusion, especially when they are the product of some diathesis or cachexia. It is better to depend upon some opaque covering for the eyes when partial or complete darkness is to be used as a remedy, and not to exclude light from the apartment.

DIVISION OF THE INFERIOR CANALICULUS—PROUT'S MODIFICATION OF BOWMAN'S OPERATION.—Dr. J. S. Prout (*Trans. Amer. Oph. Society*, 1878), describes this operation thus: "The lid is drawn downward and outward as fully as possible; the probe point of the knife is then introduced perpendicularly into the puncture, with *the cutting edge of the knife turned towards the ball;* when the knife takes the horizontal position, the edge is turned *still more towards the inferior cul-de-sac*, and in this position is pushed along the canal as far as desired, and is then made to cut out by moving the handle in an inward slightly upward direction. The result is a curved incision, the convexity of which is directed downward, which presents its canal to the lacus lacrymalis. The advantages of the method are that the tears are well carried off; the wound is well hidden behind the margin of the lid; it serves well for probing, and has, perhaps, in consequence of the free movement of one lip upon the other, less tendency to unite than the ordinary incision made with the sharp edge upwards."

SIGHT—ITS HYGIENE.—Dr. Javal (*Brit. Med. Jour.*, Jan. 18, 1879), gives the results of recent researches on the hygiene of sight. He finds that in France the rapid increase of near-sightedness is due to over-exertion and fatigue of the eyes. It is well known that after having looked fixedly for some time at a chequered piece of stuff the sight becomes confused, the eye being fatigued by a repetition of the same colors. The same thing will occur in reading a book that rests upon the table; if, however, it be moved up and down, the cause of the fatigue will be removed. The eye is also fatigued by black lines on a white ground, such as exist in almost all books. As the eye is not achromatic, the suppression of the blue color of the solar spectrum, to a certain extent, obviates the spectrum of diffusion on the retina, and thus greatly relieves the eye. Hence, printing paper should be of a yellowish tint. Long printed lines also greatly fatigue the eye.

RELIEF TO THE PAIN CAUSED BY TOUCHING THE CONJUNCTIVA WITH SULPHATE OF COPPER.—Dr. Carl Pick (*Central. für die Med. Wissen.—Brit. Med. Jour.*, Jan. 18, '79), recommends the use of calomel to relieve the pain caused by applying sulphate of copper to the conjunctiva. Four or five minutes after the blue stone is applied, calomel is dusted upon the part, when the pain at once ceases. After this has been continued five or six days, the calomel is applied to the eye immediately after the blue stone, and the pain disappears at the same moment.

ETHIDENE DI-CHLORIDE.—The Scientific Grant's Committee of the British Medical Association have been testing the value of ethidene di-chloride as an anæsthetic. Their results (*Brit. Med. Jour.*, Jan. 25, '79), are of much interest. In the six reported cases most satisfactory effects were observed. The features of special interest in these cases are: (1.) There was no injurious effect observable on the respiratory mechanism, although in all cases the anæsthetic was given in such doses as to produce complete anæsthesia and muscular relaxation, and one patient was deeply under its influence for twenty-five minutes. The limit to which this anæsthetic can be safely used will be further investigated by the committee. (2.) The pulse diminished in frequency and increased in volume, and in the deepest anæsthesia it was steady, regular, full and compressible. There was no indication of failure in cardiac action. (3.) There was never any pallor of the countenance or blueness of the lips, but on the contrary, and even during the deepest anæsthesia, there was a healthy flush on the face and the lips were rosy red. From these observations it would appear that in anæsthesia from di-chloride of ethidene, the blood still remains in normal amount in the arterial and capillary systems, and does not tend to engorge the venous system and right side of the heart as chloroform does. It thus has all the advantages of ether without its disadvantages.

SIGHT AS INFLUENCED BY SCHOOL LIFE.—Dr. R. Liebreich (*The Brain*, Oct., '78), shows how errors in the distribution of light in schools and houses, and in the posture habitually assumed during study, may interfere with the range, acuteness, or endurance of vision and deform the figure, and so damage the health. He asserts that myopia is to a great extent caused by the circumstances of school life, and that the percentage of short-sighted children is always greater in schools where unfavorable optical conditions prevail. Amblyopia and asthenopia are also often caused by unsuitable arrangements for work. To obviate these ill effects he thinks that in fitting up school rooms we must so plan as to obtain the following effects: Light must be admitted from the left hand and from above, and must be sufficiently strong. Ground and ribbed glass must be used but sparingly, and with discretion. Gas jets must be shielded by glass cylinders and reflectors. Every one when reading or writing must sit straight, and have a support for the back. The book or paper must be distant at least ten inches from the eyes, and must be raised at an angle of 40° for reading and 20° for writing.

Materia Medica.

BETONICA OFFICINALIS.—(*Chicago Med. Times*, Jan. 1879.) The preparations of betonica officinalis (wood betony) have attracted much attention and have been employed to a large extent in eastern Europe. It is indigenous to many parts of the country and is found most abundantly in eastern Germany. The whole plant is medicinal and may be manufactured into tincture, fluid extract or solid extract. The saturated tincture and fluid extract have a mild bitter taste, give rise to a feeling of warmth about the fauces and throat, and provoke the salivary secretion.

In the stomach, the flow of gastric juice is promoted, and, as a consequence, appetite and digestion are improved. The secretions of the intestinal mucous membrane and its glandular appendages are increased; consequently, the stools become softer and more frequent under its use whilst under its influence. More than the normal amount of the solid fluid and portions of the urine are passed; the power of the heart's action is increased, and the capillary circulation becomes more energetic. Hence, it is a stomachic tonic, laxative and depurant, and a stimulant to the sympathetic nervous system.

Chemistry and Pharmacy.

BAKING POWDERS AND GLUCOSE SYRUPS.—Robert Peter, M. D., professor of chemistry, etc., (*Scientific American*, Jan. 11, 1879,) in a communication to that journal discusses the probable bearing of the use of the so-called baking powders on the health and disease of those who become the victims of the cheap ærators that are used in the culinary departments of their houses and homes.

The fact seems to be that dessicated alum is substituted for cream of tartar in many of the popular baking powders. The United States Patent Office has sanctioned this use or abuse of alum by their letters patent, and alum is very much cheaper than cream of tartar. The chemical changes induced when moisture and heat are applied to these powders result in free carbonic acid—the ærator—Glauber's salt, in too small quantity to be active as a cathartic, and hydrate of aluminum precipitated. The question of interest to the medical profession as well as to their patrons seems to be this: Will not the continued ingestion of aluminum hydrate with our daily food in the long run induce disease and measurably shorten life? It would seem that the aluminum hydrate is in condition to form a chloride by the action of weak acids in the stomach during the process of digestion, but perhaps more easily would the aluminum hydrate unite with albuminous matters to form albuminates and with phosphoric acid to form a phosphate. If these last are insoluble in the stomach solution the greatest harm they can do is to cause excretion of so much albuminous matter and so much phosphoric acid as needless waste. But the greater probability seems to be that a portion of the albuminous compound accompanies the acid chyme in a condition to be absorbed into the blood vessels in the coats of the stomach, where it will have the effect to thicken or otherwise alter their delicate linings, or, meeting with the slightly alkaline venous blood, rich in albuminous compound, will induce coagulation which, however slight, will in time produce obstructions in important organs such as the liver and kidneys.

The portion of the albuminous compound which passes on from the stomach into the duodenum will come in contact with the bile and become insoluble, but again in the cœcum will be subject to the action of an acid and a second danger of absorption occurs. These are probabilities of deep import. Aluminum chloride, like tin chloride, forms insoluble compounds with albuminous, gelatinous and other organic matters, and when introduced into the blood in quantity will cause sudden death. It would seem probable, therefore, that these same chlorides when taken up in minute quantities will, in time, cause such alterations of tissues and coagulations of circulating fluids as to result in obstructions and consequent disease.

The use of chloride of tin by reckless manufacturers of glucose syrups, is especially to be reprehended. The doctor has proved, by numerous analysis, that the preparations of glucose sold under the names of "golden syrup," "maple syrup," "sugar house molasses," etc., do contain chloride of tin in notable quantities, as do also the soft granular sugars. The people everywhere should be put on their guard against this slow poisoning, and advised against the use of any syrup or sugar which leaves a metallic taste in the mouth.

It is not easy to see why we should use baking powder in preference to the old-fashioned yeast, but if we must have quick rising let us stick to pure cream of tartar and good bi-carbonate of soda until something equally harmless has been found.

Dr. Peter is informed that many more cases of Bright's disease and other forms of kidney disease occur than formerly, and pertinently asks if we may not attribute the increase of kidney diseases to alum used in baking powders, and to chloride of tin in the glucose syrups? and prays, "Give us, therefore, our old-fashioned daily bread."

HOW TO DISTINGUISH OLEO-MARGARINE FROM GENUINE BUTTER.—Dr. Hager relies for a test of the purity (genuineness) of butter on the odor it gives off in burning. He saturates a cotton lamp wick with the melted butter after it has cleared itself from water, salt, etc., by standing, ignites it and extinguishes it again after two minutes. If the butter is genuine it produces only the characteristic, pleasant smell of strongly fried butter; Oleo-margarine, on the other hand, is recognized by the intolerable odor of acroleine, familiar to any one who ever "blew out" a tallow candle.

Another method he suggests is the following: Into a small glass flask put one volume of the clear fluid butter and two volumes of a mixture of one volume of pure concentrated sulphuric acid with two volumes of strong alcohol. Distil off from the mixture a drachm or so of fluid, which is to be tested by rubbing it between the palms of the hands and noting its odor as it evaporates. Butter yields butyric ether of an agreeable smell, resembling that of Jamaica rum. Oleo-margarine is known by the tallow-like odor that remains as the more volatile ethers evaporate.

The method of Hehner & Angell is the best, perhaps, where quantitative results (approximate) are sought. It depends on the circumstance that while butter yields only 85.5 to 87.5 per cent. of fatty acids, other animal fats contain not less than 93 to 95 per cent.

ALBUMINATE OF IRON.—Bernbeck proposes the following improved process, which aims particularly at the removal of free hydro-chloric acid from the feric chloride:

Dissolve six parts of dried feric chloride in six parts of distilled water; mix the solution intimately with twenty parts of fresh egg-albumen, and throw the mixture upon a wetted linen strainer.

Express the liquid; moisten the magma with a little water and again express. Repeat this a few times. The excess of feric chloride is thereby removed. Finally dissolve the residue in one-half litre (?) of distilled water, with the aid of twelve drops of hydro-chloric acid. Allow the whole to mænate for two days, and filter.—*Rep. de Pharm.*—New Remedies.

Perfumed Iodoform—(*Cin. Lancet,* Dec. 21, 1878,) is one of the latest novelties. The solution of it, which was presented at the Dublin Pharmaceutical Conference, was prepared by shaking tincture of iodine with a fragment of fused potash, until the color was removed, and covering the odor of the iodoform produced by the addition of eau de cologne or lavender water. Lint dipped in this solution, and afterwards dried, proved a pleasant and efficient application to indolent sores.

Salicylic Cotton, Benzoic Cotton, and Liquor Aluminæ Aceticæ as Antiseptics.—To prepare salicylic cotton (5 per cent.) Paul Burns directs, (*Pharm. Centralblatt,*) to saturate 100 parts of cotton with 400 parts of a solution in alcohol of salicylic acid 5 parts, and castor oil 2 parts (or castor oil and colophony each one part). In a precisely similar manner the benzoic cotton is prepared, substituting benzoic for salicylic acid. The amount of salicylic or benzoic acid may be increased up to ten per cent., the quantity of castor oil being also correspondingly increased.

A solution of acetate of alumina is recommended by the author as superior to thymol or carbolic, salicylic or benzoic acid for disinfecting purposes, for dressing wounds, and for permanent antiseptic irrigation. He prepares the solution by dissolving in 500 parts of water 150 of alum, and mixing this with a solution in 500 parts of water of 240 parts of crystallyzed lead acetate, filtering and adding water sufficient to make the filtrate measure 1,000 parts; this solution, which contains three per cent. of alumina acetate, he frequently dilutes for use with from three to six times its bulk of water.

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Acute Rheumatism of Childhood.

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The musty lines of Papyrus Ebers, containing the prescriptions of 3,400 years ago, no less than the unbroken current of medical literature from Hippocrates to the present time, assures us that in all ages of the world's history, rheumatism and neuralgia have been the bane of the human family.

Equally true is it that in all this time little or no mention is made of such affections in childhood. Among the laity the infirmities of age are coupled with rheumatism, and, as it were, almost by common consent, all thought of such disease is banished from the joyous face of infancy and childhood.

The author is convinced, not only that rheumatism in its most typical form is seen in childhood, but also that this period of life, *cœteris paribus*, is most favorable to the development of the disease. That it has not been observed is no proof of its absence, but rather the fault of the observer. Like many other diseases which lie at the very fountain of life, it has not been much noticed by the profession, because not looked for.

The frequency of organic cardiac lesions is beyond the estimate of most physicians who have paid little attention to this subject, and is best shown in the rejected applicants for the various and extensive life assurance organizations now in operation all over the country. The vast majority of these lesions unknown to the applicant at the time of his examination, and are not referable to any attack of rheumatism within his recollection. Such cases are not congenital; they concern mostly the left heart, and date to childhood. They are referable to the same cause which is capable of the production of such lesions in adult life, viz: rheumatism. Congenital disease of the heart is quite rare, and almost always concerns the right heart and the pulmonary orifice. Morbus cæruleus is a condition too striking to be omitted or to fail of discovery, and early death is the rule. The cases therefore mentioned as frequent, which concern the left heart, are not congenital, but acquired. The lesion is not inherited, but the diathesis which produces rheumatism may be, and thus the lesion from rheumatism occurs.

The deductions which are drawn in this paper are from the careful observation of twenty-four cases of polyarthritis, occurring in children between the ages of five and twelve years. To this number I have added a case of interest occurring in a girl of seventeen years.

Two of the twenty-four children have died from renewed attacks, resulting in more extensive and complicated valvular diseases.

In three instances chorea initiated, rheumatism followed and endocarditis resulted in crippled heart.

In seven cases, chorea followed upon the rheumatism.

In two cases, the organic disease of the valves of the heart occurred during the progress of the chorea, and before there was any appreciable joint affection.

In one instance, disappearance of organic murmur was noticed to have taken place in a girl after puberty.

Cardiac lesion of some form was present in eighteen cases out of the twenty-four.

The etiology of the diseases of childhood, as regards exciting causes, are very similar to those in adult life. But there is a predisposing cause, continually operating in childhood, which ought not to be lost sight of. It is the tendency of organs undergoing rapid development to become diseased. This physiological activity originates many of the peculiarities of infantile diseases, rendering their study interesting and profitable. The great frequency of diseases of the mucous and serous membranes, with rapid effusions, and their rapid change into pus—diseases of the glandular system, the respiratory tract, etc., are quite familiar to us in practice. No part of the economy undergoes more rapid development, and is more dependent upon a perfect blood supply, than the synovial structures and the entire anatomical structure of joints and epiphyses. I have said, other things being equal, children are more liable to monarthritis and polyarthritis than adults. Fortunately the exciting causes are greatly lessened in infancy, and exposure to inclement weather must be considered as very little under five years of age.

In adults, rheumatism occurs more frequently in males. In childhood the preponderance is not only reduced, but actually reversed. Girls, more than boys, suffer with acute rheumatism, and the highly developed nervous system, the legitimate inheritance of females, gives direction to the cause. While there is no reason to doubt the occurrence of rheumatic and neuralgic pains in infancy, considerable care is necessary if, indeed, by great diligence we can avoid confounding them with the pains of inherited syphilis (tertiary), or the commencement of rachitis. "Growing pains," so often observed and so seldom treated, are rheumatic pains. I have no doubt that the popular idea in regard to such "aches" and "pains," attending a rapid growth and development in childhood, has led to many crippled hearts and shortened lives. Again it must be remembered that the pain in monarthritis, and even polyarthritis, of childhood is either not so severe, or is better borne by them than by adults. A familiarity with the manner in which little folks bear pain is very important in the appreciation of this difference. It is often not more than attends upon the gastric or remittent fever for which rheumarthritis has not unfrequently been mistaken, until cardiac symptoms have shown its true nature. In many more instances the endocardial roughening escapes observation altogether.

In the adult, temperature in acute polyarthritis is extremely high—so elevated that were it not for the perspiration present, the body heat would itself endanger life.

In childhood, the temperature in such cases is often high, although not so high as in adults; the tongue is usually covered with a heavy, creamy coating, through which, as in gastric fever, the papillæ project. Pain is referred to the ankle or elbow, and especially to the tendo achillis, or the bursæ near its attachment. Children who grow rapidly are more subject to such pains; hence the feeling of security which bears such pernicious fruits. There is no appreciable difference, as concerns the effect upon the organism, between the child stunted by poverty and one growing rapidly under good hygienic conditions with wholesome food. In both, the system is impoverished; both lead to tubercular deposit if kept up sufficiently long, and to pain of a rheumatic character.

Every one knows that "catching cold" from chilling the surface is likely to be followed by symptoms of rheumatism more or less marked, and this from observation repeated a thousand times over, but every one does not know or fully appreciate that the consequence of such exposure is more disastrous to the child than to the adult. The resulting arthritic symptoms can not be due simply to the retention of the effete matter arrested in its egress from the skin, for it is well known that the interchange of functions (vicarious action) between the skin and kidneys is so close and compensatory as at once to be effectual. Diuresis attends at once upon chilling the surface, thus affording a ready escape for poisons retained. Moreover, the extent or severity of any case of rheumatism by exposure bears no relation to the extent of surface exposed. Two out of twenty cases observed during the past year were diagnosed while attending another patient in the house or family, my attention being called to the complaint of pain or weariness in the limbs. So slight were these symptoms that they elicited no anxiety on the part of parents, who were kind in all matters pertaining to the family. In one of these cases chorea followed upon the rheumatism, and endocarditis, with permanent mitral lesion, terminated the case. In the other the symptoms yielded to treatment of the rheumatism, and have not since returned. The danger in these cases is out of all proportion to the severity of pain or the extent of the local manifestation. The child whose ankle or elbow "hurts" to-day, may, on the morrow, be the subject of a disease which may speedily kill or send an invalid through a life of jeopardy.

The following cases have been selected as possessing more than ordinary interest, and are inserted in this place as illustrative of some important points in the etiology, progress and sequelæ of the disease. All of the cases mentioned in the foregoing synopsis are interesting, and would afford a profitable study, but a detailed report of all would be entirely too voluminous, and involve much repetition.

CASE I. Originated from a great fright—Chorea, followed by cardiac lesion—Systolic murmur, followed by polyarthritis, resulting in complicated valvular disease—Extensive endocardial roughening—Mitral insufficiency with stenosis of the left pulmonary ostium—Rapid and extensive dropsy—Death.

Willie ——— was in good health the day before the following occurrence: While my buggy was standing at the door of Mr. ———'s residence, and I was within, conversing with that gentleman, then convalescent from recent illness, the cry of "fire!" was raised in the street, and the bright glare filled the apartment. The fire proved to be disastrous, and concerned property in which the gentleman was interested. Most of the family, with himself, went to the burning building. At the time, Willie, who was left asleep in an upper chamber, awoke. The noise in the street and the bright glare in his own bed-room caused such terror that his sister's attempt to quiet him proved unsuccessful. Upon being brought down stairs he vomited several times, remaining pale and trembling. I was obliged to remain late into the night, and found him the next morning still pale. In the next week he was corrected by his teacher for fumbling with his right hand while reading at school. By my advice the lad was removed from school until he should be restored. The choreic symptoms, which were at first unilateral, now became general, and the anæmia possibly more marked.

Arsenic, with bitter wine of iron, were administered through several weeks, possibly with advantage, after which time a visit to Long Branch and a residence for a month near the sea, put an end to the chorea.

Upon his return home I saw him, and at once auscultated his heart, and found, to my surprise, a soft, blowing murmur, systolic, heard plainer at apex, and transmitted posteriorly. The bruit, at first slight, increased under the use of iron and digitalis. In the early autumn of the same year I was again called to him, and found him suffering from monarthritis, the ankle alone affected. Presently the knees and left shoulder also became swollen and tender. A fresh attack of endocarditis followed, and resulted in extended injury and roughening of the lining membrane and its duplicature (valves). He complained greatly of dyspnœa; expectorated, with little difficulty, large quantities of ropy mucus, tinged slightly with blood; jugulars showed marked pulsation, and auscultation discovered a blowing, rough murmur at the juncture of second rib with the sternum, which was atro-systolic and pre-systolic. Also the click of the closure of the pulmonary valves was distinctly and loudly marked. Diagnosis now was mitral insufficiency advanced, to which was added stenosis of the left ostium, which, acting together with the insufficiency, had produced great engorgement and dilatation of the right heart, with rapidly approaching disaster to the venous circulation in jugulars and lungs—possibly, also, the tricuspid insufficiency might not have been entirely compensatory, but a part of the extensive endocardial roughening. Œdema of the lungs developed rapidly. Anasarca with ascites became, in a short time, unbearable; digitalis could no longer compensate over the long systemic circulation as it had done over the mitral lesion, and he sank rapidly and died of most extensive cardiac complicated lesion.

Case II. Chorea of most violent character developed from exceedingly slight rheumatic symptoms—Great functional disturbance of the heart —Murmur heard over the heart during the progress of the chorea, does not cease with the cure of the disease, but remains present as organic lesion—Recovery.

Annie B., age, 13. She had grown rapidly in stature during the past year, and was anæmic; complained frequently of pains in the lower limbs, about knee and ankle joints, for the relief of which she was brought to me. I explained to the mother the rheumatic nature of what she supposed were "growing pains," and inquired carefully in regard to even the slightest choreic symptom. None had been noticed. I therefore prescribed for her rheumatism, directing quiet and complete rest. The painful symptoms rapidly disappeared. One week afterward slight symptoms of chorea were noticed, and as the parents had been warned of their appearance, they were on the lookout. The inco-ordinate movements were first noticed at table, and were unilateral; soon, however, became general, and in two weeks became so violent that the contortion of limbs and face were frightful. So it became necessary to confine the patient in bed. Arsenic had no observable effect upon the severity or continuance of the disease, but the tr. actææ racemosæ, with ferri iodidi combined, was followed by marked improvement, and was pushed to the cure. In five weeks, during convalescence, a soft, blowing murmur was heard during the heart's systole, louder at apex, continued into large vessels and communicated to the ear, applied posteriorly. During the height of the chorea, intellection was greatly affected, and apprehensions were entertained lest she should remain idiotic. The iron and cohosh were continued into convalescence, after which digitalis and iron were given. The bellows murmur became more distinct under digitalis, and the hope that it might have been of hæmic origin was abandoned. The girl is now at school, and will carry a crippled heart, most likely, to an early grave.

Case III. Mitral insufficiency discovered in physical examination—Complained of slight rheumatic symptoms, but was not treated, when seven years old—Repeated attacks of rheumarthritis, commencing with pain in heart and resulting in extreme endocardial mischief—Anasarca—Ascites—Death:

Sallie R., age, nine years; fair skin, tendency to freckles; presented for cough; found loud blowing murmur, systolic, and loudest at apex, and mother stated that she often had pains, which she thought were "growing pains," two years ago. I attended Sallie from that time in six or more distinct and severe seizures of polyarthritis. Severe pain in the region of the heart was the signal of attack. Three times, when it so commenced, polyarthritis resulted. The termination of this case was singularly like that of little Willie. The first valvular lesion became complicated in subsequent attacks. Late in the case there was no difficulty in the practiced ear, applied to chest, detecting aortic and mitral insufficiency, with stenosis of the left auriculo-ventricular orifice, by renewed curling and deposite. After the anasarca became extensive and œdema of the lungs was choking the patient to death, the jugular pulsation was so well marked as to be seen across the room; right ventricle became so distended as to form the apex and presenting portion, behind which the left retreated. Digitalis always seemed to do great good, and she always said she wanted that medicine, for it took the *pain out of the heart.* Not long after the last attack, the debt of incompetency became again due, and could not be met. She died, as in case I. It is the exception for persons to die suddenly of heart disease. Some instances are always occurring in a large city, but the vast majority of crippled hearts go on to termination of life by dropsy; the occurrence of which often prolongs a miserable existence by the temporary relief which the heart thus obtains.

Case IV. Repeated attacks of polyarthritis—Seven distinct and severe seizures in four years—Œdema of lungs—Anasarca—Ascites—Extensive and complicated valvular lesion—Recovery:

Minnie B., age, 12 years. When she was first presented to me, mother stated that she had been treated by physici
three or four spells of rheumatism. Mitral insuffic

pre-systolic murmur present; cannot lie down at night; choking spells (cardiac asthma); lower extremities greatly swollen, and œdematous; also hands and face puffy, respiration panting, and dyspnœa, at times urgent. Infusion digitalis co. with broom, henbane, parsley and juniper, drank freely; in a week was able to lie down at night and sleep without cough, and walk without fatigue; ascites, the last remaining dropsy, which gradually yielded; patient able to go about house and out of doors; treatment changed for tincture of iron with tr. digitalis. Although I have treated her four times in three years for polyarthritis, there has been no return of dropsy. Two years ago she was again presented, and I found her suffering with chorea. Her movements were irregular and not under control of the will, but were not at any time violent, as in case II. Very severe and general acute arthritis followed upon the chorea. It was thought at one time that she was dying. She had taken salicylic acid, then a new remedy, in twenty gr. doses, with almost complete relief of the pain and swelling in joints, but had *heart failure;* cyanotic appearance of face; hands cold and purple. A blister over the heart and digitalis set her going again. I have never seen so prompt an arrest of arthritis in so severe a form as was obtained by the twenty grain doses of acid given by my friend and pupil at that time, Dr. Wells. I had never before given over five gr. to any one. The relief to pain followed in an hour after the first dose, and in six hours almost all evidence of arthritis had disappeared. I am inclined, however, to attribute the dangerous and threatening cardiac sedation to the drug. Upon convalescence from the attack, she began to grow quite comely; suffered with occasional pains in back and much headache, for which the mother again consulted me. A few doses of ammoniated tr. of guaiaci established menstrual function. She is now a woman, quite handsome and well developed, although she has mitral insufficiency and stenosis. Compensation over the embarrassed circulation has been obtained by great hypertrophy and long-continued digitalis. She has missed her

cardiac pain. The murmurs are loud and rasping, and

lse can be seen through her clothing quite across the room. The recovery in this case is the more remarkable when it is considered that three times she has been unable to walk on account of anasarca and ascites. Only once in the last year was it necessary to resume the digitalis on account of threatened failure of compensation, and then for a month only, giving ten or twenty drops a day of the tincture. She has been performing light service in a family, having care of the children and doing light work as house-maid.

The following case illustrative of polyarthritis in more severe form:

CASE IV. Disturbance of the vaso motor and trophic nerves by suppressed menstruation the remote cause—Pericarditis with effusion relieved by treatment—Extensive endocardial inflammation—Mitral insufficiency and stenosis of the left pulmonary ostium—Evidence of pulmonary embolism—Pneumonic induration—Œdema and anasarca and death.

Kate R., age 17, sanguine nervous temperament, blue eyes, red lips and cheeks; skin exceedingly fair and beautiful; impressing the diathesis of struma; form and figure well developed; has never had occasion to employ a physician in her recollection; other members of the family equally healthy. Four months ago contracted severe cold by exposing her feet while menstruation was present, since which time she has not menstruated. The suppression gave rise to no alarming symptoms, except occasional headaches and tired feeling in limbs. At length she was seized with pain in *left breast;* had dyspnœa and high temperature, and a strange urticarious eruption all over body and extremities, appearing in wheels, circles and lines, giving rise to great anxiety as a report was current that the girl had small-pox.

Upon exposure of the chest my attention was at once attracted to the tumultuous action of the heart, which was perceptible over the whole thorax. The contact of my ear over precordia gave so much pain that I was obliged to desist from any prolonged examination and auscultation. There was, however, no difficulty in making out friction, murmur, double and loud at base of the heart; a very soft blowing sound accompanied the systole. The apex beat was lost at its normal site; an appearance of apex beat was noticed near the junction of the sternum with the sixth rib, formed more probably by the wall of the right ventricle. Next morning on my visit I found her propped up in bed, with a wild and nervous expression; countenance extremely anxious; breathing gasping; the dyspnœa was so great as to prevent plain articulation of words and swallowing liquids; lips and finger nails livid. The tatooted eruption of the previous day appeared mottled and purple. She felt herself that she was dying. The cardiac sounds of the previous day could no longer be heard. Violent commotion of the chest denoted the pulsation, and bulging of the left thorax was quite plain. Width of dullness ascertained by percussion to be about six inches at the apex. Feeling that my patient was about to die, I prepared to aspirate the pericardium and relieve the rapidly accumulating effusion. There was necessarily some delay, and in the mean time I ordered a smart fly blister placed over the bulging thorax, and at the same time left prescription for digitaline, squill and calomel, in full doses every hour. Returning in the evening, to my surprise and gratification, I found her looking much better; warmth and circulation in the extremities good; had voided urine in my absence, several ounces; she was now able to take several swallows of tea. On account of this change, although the physical signs were of an alarming character, the friends were so strongly inclined to continue the medical and defer the surgical treatment, that I yielded, telling them, however, that the necessity would soon recur, and to inform me at once of increasing dyspnœa. I was greatly strengthened in my determination.

At this juncture, by one of those fortunate coincidences for which we feel so grateful to those who observe closely and record correctly, a medical friend had placed upon my table the last number of the *Medical Record*, containing the report of a case of successful paracentesis pericardii by Dr. Wm. Pepper, of Philadelphia. There was not only a close similarity in the condition of both cases, but the age of the patient and her clinical history closely corresponded to my own case. Dr. P. reports his as the fourth case operated upon successfully in the United States, and the forty-fourth in all medical literature. I was obliged and inclined to desist, and in the interim ordered the continuance of the digitalis and squill, and in addition full doses of ex. of jalap, elaterium and calomel, to be taken until relieved. Excessive purging followed, resulting in great relief, and I found her again in recumbent position. There was evident diminution of fluid in the pericardium, and the apex beat could be felt higher up and nearer by the border of the sternum. The ankle, elbow, knee and shoulder joints became swollen and very painful. Salicine in 10-gr. doses every hour; digitalis and squill continued.

March 13th—two days later—I was called to see her on account of return of dyspnœa and cough. The painful joints were entirely well; she had taken ʒiii of salicine; the urine had lessened in quantity and was loaded with urates; œdema of feet noticed; pulse again quick and feeble. I at once suspended the digitalis, which up to this time had been freely given, and ordered instead vini semin. colchici. At another time the same day, ordered ℥j of the ext. jaborandi to be taken in two doses; little diaphoresis but profuse ptyalism followed, and she felt much better. Pleuritic friction sounds could now be distinctly heard over the left lung posteriorly, and pain on coughing became severe. Returning friction sound, double, could be heard over the base of the heart. A blister over the painful pleura was productive of relief.

In the next month, while I was away from the city for a few days, she was again taken suddenly ill. She had not been at any time able to do more than sit up in day-time out of bed, and when I returned I was sent for, but she was dying from what her attendant called pneumonia. There was evident consolidation, and probably of thrombic origin.

REMARKS.

Although this case is not strictly included in those before enumerated, its interesting features and recent occurrence led me to introduce it here. It is worthy of notice that the arthritic symptoms did not develop immediately upon the exposure of the person, as they should have done according to the humoral theory of checking the escape of lactic acid in the tissues; but four months afterward, when the nerve-centers became affected by transmitted irritation from the ovaries, and congestion of remote organs was taking place, then the trophic nerves through the vaso motor became so affected as to produce a change in the process of tissue nutrition, and rheumatism resulted. The lactic acid, if it be demonstrated to be present in the joints (which is extremely doubtful), stands as a result rather than a cause of the phenomena noticed in polyarthritis.

Just as the wasting goes on from day to day in the infant, sometimes until the attenuated limbs and frame are a diminutive skeleton, without the presence of any demonstrable organic mischief in the system, just as the chlorosis goes on until death threatens; just as pernicious progressive anæmia in pregnancy originates and goes steadily on to fatal termination, without other than peripheral nerve irritation, so rheumarthritis may be developed from a changed neurosis affecting the ultimate digestion through the nerve-centers which govern nutrition. The too little appreciated torture endured by the hysterical female, whose will power is affected by vaso motor spasms, is often preceded or accompanied by great tenderness and pain—a hypersensitiveness of the cutaneous nerves, by reason of the blood supply. It cannot be denied that some of the most remarkable changes in the growing child are effected by reflex irritation from the genital organs prior to their development into activity of function.

The skin eruption present in the case before the development of other symptoms, was not the result of hydrosis, but a part of the neurosis.

The heart was first affected, the joint affection followed. This is far more commonly the case in childhood than in those of her age. Nevertheless, some pain in the heart may precede more attacks than is known; the pain, if present, is soon forgotten in the involvence of the joints.

The effusion was rapid. In this the case resembles those of early childhood—rapid effusion and rapid change to pus, is the rule. Pleuritis accompanied the pericarditis. This is usual, and the absence of any affection of the pleura when the pericardium is influenced, would be exceptional.

Finally, not the least interesting feature in the case was the prompt and energetic action of some old-time remedies and therapeutics. The familiarity of the great majority of practitioners with the aspirateur, and its complete harmlessness in almost any point, has, no doubt, led to its use in cases of simple effusion into the pleura, and its oft repeated introduction where the energetic treatment formerly used would prove more complete. Had I used the needle in this case for the relief of the pericardial effusion, as I should certainly have done had it been at hand, it would have been said, that under the extreme circumstances, nothing else would have saved this life, and therapeutics would have been robbed of its just credit.

TREATMENT.

While modern research and pathological study, even in the light of an advancing science, have done comparatively little, either in the etiology or pathology of acute rheumatism, experimental therapeutics has brought forward the treatment to such an extent as to merit the acknowledgment of the tortured sufferer. A bright and manly little fellow of nine summers told me on one occasion that he knew why they called it rheumatism. Because they had to stay so long in one room. He was evidently ignorant of the rheumal theory, but came unpleasantly near to the truth. If the lactic acid theory has been unsatisfactory, the chemical treatment naturally suggested by such theory, has proven still more so. This treatment affords very little pleasant reminiscence to the contemplative and conscientious physician. The daily routine visit always lasting over six weeks of suffering —the alkalinized and ruined stomach, the disgust for food, and finally the crippled and shattered frame in which the convalescent emerges from his prison house, again to make his debut in actual life—all conspire to make a picture only too familiar in practice. Lucky the fellow who possesses the unshaken confidence of his patient from beginning to end of the case.

SALICYLIC ACID.

It has now been four years since the therapeutic properties of this product became known. In the meantime, the salicylates of various alkaline bases have found their way into the most remote and obscure regions of the earth. Another year of practice has confirmed my former views of the power of the salicylates over acute rheumatism. Some doubts have been raised as to the permanency of its cure, inasmuch as the relief of suffering and the removal of the local manifestations are often magical. It has also been argued by some that salicylic acid has no effect upon the cardiac complication. It may be answered, that when once the mischief has been done we possess no agent which will remove it. The danger of such complication, if, indeed, it be considered as a complication, must be admitted to be in proportion to the duration of the disease, and therefore, by cutting short the disease—as I have been able to do in scores of cases within forty-eight hours—we secure immunity from the dreaded termination in crippled hearts and early death.

It is true that such treatment is empirical. The physician, in his attempts to alleviate human suffering and to cure disease, is often compelled to resort to empirical remedies, and reserve his theorizing and speculation for such spare moments as he may have to devote to so delectable an exercise.

There is reason to believe that synthetical reasoning will result in more benefit than analytic study of rheumatism. At our last meeting I was using salicylic acid as best it could be administered and felt to accord praise to its prompt and energetic action. Its effects upon the stomach were extremely unpleasant; its taste was such as almost to prohibit its continuance, while I have several times been obliged to suspend it because of suppression of urine and decided irritation of the kidney. Nevertheless it cured many cases in my hands. Later I have found the salicylates to be very efficient, especially the salicylate of m. At the present time I am getting from salicin, interninistered, all the good which can accrue from the acid. ydrate of chloral is preferred for internal administrament in child practice. The least objectionable and safest is veratrum. I am forced to admit that I have seen from veratrum and quinine most admirable results in adult polyarthritis. Attempts have been made to explain the action of salicylic acid by its well known effect upon temperature. It has this effect, however, in all diseases, but it cures none of them but rheumatism. In the alkaline treatment, lemon juice and the salts of potash with vegetable acids, are preferable to the more staple nitrates and bi-carbonates.

CEREBRAL AND CARDIAC COMPLICATION.

Cerebral complications are by no means as frequent in children as in adults. I have never seen a child with sudden cerebral symptoms of embolism or inflammation of the nervous envelopes of the brain. The sudden rise of temperature would be an indication of this.

The frequency of organic cardiac mischief, after slight attacks of rheumatism, is better appreciated at this time than ever before in the history of medicine. The arthritis present in the child bears no relation .to the extent of cardiac mischief which may be produced. I have seen a pain which began in the bursæ beneath the tendo achillis, slightly implicating the ankle joint, result in mitral regurgitant and aortic direct murmur in forty-eight hours. I have mentioned cases in which the only pain complained of was at the heart, or as nearly all children say, in the stomach. It is, therefore, not surprising that both Andral and Bouillaud should be led to consider cardiac manifestation as a normal expression of the disease (rheumatism), especially in childhood. Sufficient illustration of such cases, and their termination has already been given. Should pericardial, myocardial or endocardial inflammation occur, or as has been seen, should any one of these conditions usher in the disease, much good may be accomplished by prompt and energetic treatment. Blisters, or in the very young, rubefacients are to be applied over the cardia or precordia. I have found great good from a linseed meal poultice, sprinkled with a little mustard flower, in such case, pain being relieved at the heart.

There is little danger of cold applications, ice bags, etc., to the affected joints becoming popular among the laity. Such measures certainly tend to the production of cardiac complication. The management of the convalescence of such cases as have developed organic disease of any of the valvular orifices of the heart should include such medicinal agents as: Tr. of the chloride of iron, chloride of ammonium, tr. digitalis and tr. guaiaci. The cases already mentioned show both restoration and loss of the lesion under this treatment during the growth of the child to manhood or womanhood. It must be remembered that in the mitral disease, so much more common than any other lesion from child rheumatism, the tendency is to dilatation rather than hypertrophy. The valves may not be so extensively diseased as the sound would indicate, but the stretching of the cardiac walls increases their patulency, and under compensative hypertrophy of digitalis such murmurs sometimes disappear; so that if we are appalled by the great frequency of this fatal lesion in child rheumatism, we are encouraged by the thought of suitable compensation during a stage of active growth.

Jaborandi is destined to take a high place in articular rheumatism, as also in some of the chronic manifestations of the disease. The muriate of pilocarpia is an eligible form for hypodermic administration, half a grain being sufficient to produce diaphoresis.

Propylamia, or propylamine, has not proven in my hands to be more valuable than the liq. ammoniæ fortior, two or three drops in a wine-glass of water. This treatment is more advantageous in chronic rheumatism, and often acts like magic.

The unequal climate of our middle latitude is especially favorable to the development of rhematism. I am informed that the Northwestern States, although beneficial in other diatheses, are especially prone to rheumatism. Florida affords the surest protection, and I am informed that those who possess the rheumatic or lithic diathesis secure to themselves an immunity from attack by a residence in the selected portions of that State.

CHOREA.

The intimate relation existing between chorea and rheumatism has been the subject of much study and varied opinion by the profession. That this relation is causal, without any order of sequence, must, I think, be the conclusion of every close observer, if, in fact, it be not true that rheumatism and chorea, so termed, are but different manifestations of the same disease. Quite a large number of cases in which chorea developed upon acute rheumatism and conversely, each producing cardiac organic lesion, could be added from my own observation during the past year, but the two already mentioned were more distinctly marked, and for that reason have been chosen. We speak very properly of rheumarthritis as an acute affection. It would be an error of observation to use the same expression for chorea. Chorea is never acute. It is always preceded by some noticeable debility, as anæmia. Various attempts have been made by different observers to establish and locate the organic mischief in the brain, the corpora striata, and in the spinal cord. Among the most attractive of these theories was that advanced by Dr. Hughlings Jackson, by which the symptoms are thought to be due to embolia, or plugging of small important arterial twigs in the brain with fibrinous clots cast off into the current of the circulation at some point. All attempts to establish an order of sequence in such cases have failed to conform with the symptoms, and clinical study fails to verify this otherwise beautiful and ingenious doctrine. Recovery of chorea under proper treatment and favorable hygienic surroundings is the rule. It occurred in all of my cases. Certainly this could not be expected were the mischief as described. Rheumatism, or at least endocarditis from some cause should start, embolism should follow; and this in every case. The irregular muscular action should remain upon one side, which is known to be rare even for a short time. Paralysis of the affected side should be the termination. That chorea may be so caused, and may so terminate, cannot be doubted; but that a cure should result either spontaneously or by treatment may well be doubted. The history of the disease and the origin of its most common name, St. Vitus' dance, shows it to be associated with famine, starvation and spasmodic ergotism.

There is a wonderful similarity in some of the diseases of the spinal cord, as far as arthritis is concerned, and so-called acute inflammatory rheumatism, and it is not always easy to distinguish myalgia cervicalis or myalgia occipitalis from more serious disease of the brain and cord. The painful joints and observed climatic influence upon the development of epidemic cerebro-spinal and spinal meningitis is a strong point in favor of rheumatic origin. Again, sufficient importance is not attached to the possibility of rheumatic as well as choreic symptoms being dependent upon intestinal parasites. The death of many soldiers in Napoleon's army in Egypt was known to be due to the tricocephalus dispar, and the disease was allied to meningitis with painful joints, was exceedingly fatal, and thought to be caused by the anæmia produced by the boring of these entozoa. The idea that such anæmia of the cord can be produced by these parasites and by trichinæ without loss of blood, simply by peripheral irritation of spinal nerve, did not seem to be fully appreciated. In seven cases I have been able to associate ascarides in great numbers with return of rheumarthritis.

At the present time I have under observation an extremely interesting case bearing upon the effects of vaso motor spasm upon the trophic nerves. The patient, two years ago, began first to complain of an indescribable feeling of flushing over the left side of face, and upper extremity. Little attention was paid to it until it became so annoying as to excite some apprehension, when he sought medical advice. It was evident from the treatment he received that the medical man was on the track of an aura epileptica. A year later he consulted me. At this time cutis ranserina plainly accompanied the first sensation, and extended first to arm, face, then to the legs of same side. At first unilateral, it afterwards became general. Auscultation, repeated with great care, led me to detect an aneurism of the descending portion of the arch of the aorta, probably fusiform. So delicate and circumscribed was the bruit at first, that I requested he would allow me to examine from time to time, which he did. A perceptible increase in the bruit, and extension of the aneurism has been noticed and pari passu an increase in the vaso motor spasm. A color change is noticed in the face—pallor, followed by a congestion which assumes a purple hue. Although a little alarmed sometimes, he has never lost consciousness for a moment.

The attacks are now followed by urticaria, which is increasing, and greatly annoys him on account of the itching. It seems entirely in accord with the facts to attribute the symptoms to pressure upon the inhibitory parvagum as it crosses the aneurismal tumour. The change now apparent in nutrition is exceedingly interesting to watch.

Prof. Sayre, of New York, among the many good and great things which he has done for the advancement of the profession, has developed and described a condition affecting child life and growth which has lain hitherto quite unnoticed at the very root of deformity, both physical and mental. Succeeding generations will bless the removal of many imbeciles and cripples from their midst. The irritation transmitted from the adherent prepuce does not differ from other peripheral irritation, save that it is continual, and therefore the symptoms are steadily progressive. The trophic nerves are not allowed an occasional supply. Constantly in sleep or in waking does the cause continue and the atrophy advance, until it suddenly ceases with the removal of the cause. In seven cases of adherent prepuce upon whom I have operated, four showed marked tenderness of joints, one had epileptiform convulsions, and so perfect were they that I termed the case preputial epilepsy. In one the intellect of a boy of seven was dwarfed at about three years, and it was painfully interesting to note the baby ways with the advancing imbecility. The gradually weakening intellect of the choreal boy or girl is wonderfully similar to that seen in my cases of preputial reflex irritation. In all of these the removal of the visible and demonstrable cause put an end to the continuance of the symptoms, and a perfect restoration has occurred in all but one, which is still under treatment. The object of this digression from the text of this paper is to better illustrate what I believe to be the etiology of certain rheumatic conditions, of which the lactic acid and the presence of lith-uria are but consequences.

Fright is an acknowledged cause of some cases of chorea, and the case of little Willie H. was an illustration of the power of such impressions in the production not only of chorea, but also of rheumatism, as well. The pernicious progressive anæmia of pregnancy is alone explained upon the ground of reflex spinal irritation. The chlorosis of the maiden has its origin in peripheral irritation through the developed ovary. One of the most remarkable cases of anæmia, or more properly lukæmia, occurred in a young married woman in my practice. Previous to a great fright she was stout and healthy. A fight occurred, in which her husband was implicated; knives were used, and blood flowed freely at the time she came into the bar-room. She was taken ill that night, and I saw her next morning. In forty-eight hours she was perfectly lukæmic; the cheeks and buccal mucous membrane and the lips were as white as wax; respiration was sighing; no blood had been lost externally, nor was there any evidence of internal extravasation; raising her head caused fainting; she was three or four months pregnant. After three months she was restored so as to sit up.

In the treatment of chorea, the fact of the close relationship to acute and chronic rheumatism must not be lost sight of. A sufficient number of cases have been cited to show that it may initiate or result from rheumatism, and that alone and uncomplicated, it is able to do permanent cardiac mischief. Moral and hygienic surroundings are of the greatest importance. Those parents who have the welfare of their children at heart, will be prompt in suppressing the various machinations of unprincipled nurses to frighten children into obedience. The fact that chorea is not of frequent occurrence among the ignorant uneducated classes, is a significant one, and bears directly upon the extent to which school-room application is to be carried. No less care is necessary to secure quiet in this than in the rheumatic manifestation. The exhaustion produced by the violent and uncontroled action of muscles contributes largely to the continuance of the disease. The most nutritious and easily digestible diet must be allowed—rare or raw meat, fish and eggs, with bread from unbolted flour. The fact that the movements seen to be so violent during the day, cease during sleep, has led to the employment of such agents as chloral hydrate, potassium bromide, conium and other depresso-motors. They are often ill-advised, and result in more extensive mischief, starving the already anæmic nervous system. Better results are seen to follow the permanent hematic tonics, such as change of air and scene, iron, arsenic and zinc among the minerals, and cimicifuga, racemosa from the vegetable kingdom. The same objection may be raised against the employment of strychnia and electricity; such agents excite or stimulate the functions of the nerves, without the power to maintain or build up their tissues. Cimicifuga, so long employed by the medical profession, has given most excellent results in my cases, as also arsenic and zinc. A selection or choice between arsenic and iron or zinc may be based upon the anæmia present in the case. Whatever agent be employed it must be pushed as largely and continuously as it is possible. The long continuation of chorea means, in the end, imbecility or idiocy.

In regard to the disappearance of murmurs believed to be organic, the question naturally arises, does an organic lesion, when once established in the heart of the child, disappear upon approach to adult life?

It is difficult to understand how simply the growth of the heart unaided could result in such beneficial change. As dilatation is the rule in childhood, the diseased and imperfectly closed valves would be subjected to still more patulency by traction of the heart walls. A few months since I had the satisfaction of meeting a fine looking young lady from a neighboring city. I recognized in her a little patient whom I had treated for rheumatism endocarditis and anasarca. Upon careful examination I was delighted to find the murmur no longer audible and the impulse full and strong. She had followed my directions, taking iron and digitalis with interruption for several years.

PAIN IN THE HEART A RHEUMATIC SYMPTOM.

Case IV. illustrates the inception of the attack by pain in the heart. I am satisfied that such symptoms in persons of rheumatic diathesis are by no means rare. In five other instances it has been my observation that in those children whose hearts have suffered organic change, recurrence of polyarthritis is far more frequent than in those who have escaped such cardiac lesion. That the heart may be the seat of pain from emotional causes is in accord with the popular belief, founded no doubt upon individual experience. I have seen many instances in the service, of pain referable to the heart in nostalgic soldiers. The presence of the cardiac lesion moreover tends to produce a return of rheumatism. It has been my observation that those who escape the cardiac lesion are not more liable than others to the return, but the effect exerted upon the nerve centres by a heart at times inadequate to the wants of the circulation is such as to impair perfect nutrition, and place the patient in renewed danger from want of resistance.

"Our Relations to Jurisprudence."

DR. EDWARD COX'S REPORT AS CHAIRMAN OF COMMITTEE.

The undersigned would respectfully report that he has had under consideration "Our Relations to Jurisprudence," and has given the subject the attention that time and circumstances would permit.

Our relations to society are more dignified, and our duties more numerous, than those of any other vocation or profession.

As physicians, we are called upon to attend the sick; as surgeons, to attend upon the various wounds and injuries from casualty or otherwise; as gynæcologists and accouchers we, as the physical guardians of women and their offspring, must not only attend her in parturition, but herself and children in all the diseases of her sex and of childhood.

As sanitarians, we are expected to provide against the spread of epidemic and contagious diseases, and to prevent the generation of disease in our homes, and to advise legislators relative to the enactment of sanitary laws, and to advise local authorities relative to the execution of the same.

Among all our duties to society, perhaps none are of more importance than our relations to jurisprudence, "the science of law," as no efforts in behalf of justice can be more important than those designed to enable the law "to reap promptly the full benefits of science."

By a faithful performance of our duties in this matter, Dr. Rush said: "Crime, fraud and violence may be detected and punished; unmerited infamy and death may be prevented; the widow and orphan may be saved from ruin; virgin purity and innocence may be vindicated; conjugal harmony and happiness may be restored; unjust and oppressive demands upon the services of your fellow citizens may be obviated, and the sources of public misery in epidemic diseases may be removed by your testimony in courts of justice."

The services required of the medical expert have a wide range.

In case a person is found dead, he is the first man called upon. He must examine and report the cause of death, to satisfactorily ascertain which he must be a good pathologist, physiologist, chemist, microscopist, and in fact he may be obliged to apply every branch of medical knowledge and the whole range of medicine and the natural sciences to fill the requirements of our relations to jurisprudence.

The frequency with which the medical jurist is called upon is great. Dr. Challie, in an address before the International Medical Congress, in 1876, stated that there were annually 45,000 medico-legal autopsies in the United States. That in the same time there were 2,500 to treble the number of criminal trials necessitating medical testimony, most of which originate in coroners' inquests, and that enough medico-legal civil cases can be found in our courts to increase the number to 20,000.

To arrive at accurate conclusions, and to do justice in all these cases, requires a greater amount of knowledge and versatility of talent than is possessed by any one human being, and yet the law receives the testimony of every person, educated or otherwise, who styles himself a doctor, in all the complicated as well as simple cases that come before the courts.

If a person is found dead, we must judge whether from natural or other causes. If wounds are found on his person, were they inflicted before or after death? If previous to death, are they necessarily fatal, or are there other causes that produced the fatal event? Did he die from poison; if so, of what kind—narcotic, irritant or otherwise?

A person may be drafted into the army, or have some other selfish reason for feigning disease. Upon our skill and testimony depends the decision in his case. Upon our opinions of the impotency of the husband or sterility of the wife may depend the result of a suit for divorce, and our testimony will either set at liberty or incarcerate a person charged with rape. Our opinion of the condition of a maiden may consign her to infamy or release her from the unjust persecutions of enemies.

A widow claims to be pregnant at the time of her husband's decease, or, perhaps, to have been delivered of a child; thereby claiming the estate of her late husband. Our testimony determines whether her pretensions are true or false, and consequently whether she and her child inherits the patrimony.

A woman dies under suspicious circumstances. We make an autopsy and decide whether or not there has been criminal abortion perpetrated.

A child is found dead. We must inform the coroner's jury whether it has ever breathed, and consequently, whether or not a murder has been committed.

Legitimacy of a child may be disputed, and our opinion will be taken. A casualty destroys a whole family, and our opinion is asked as to the presumption of survivorship. And occasionally we are called upon for our opinion whether fraud has been perpetrated in obtaining a policy of life insurance.

More often than either of the others, physicians are called upon to testify relative to the sanity of persons accused of crime; of our opinion as to their moral responsibility. Also, with regard to the mental capacity of persons for transacting business; particularly for making wills and devising estates.

From what has been said it must be apparent that the highest order of talent and education is necessary for performing the duties growing out of "our relation to jurisprudence."

Our laws have done but little to apply medical knowledge to the administration of justice. Law is conservative, follows ancient precedent, works by general rules, makes slow progress, and is jealous of innovations. Medical science is progressive; it has no rules applicable to all cases; it discards them. The lawyer brings his case within an established rule; the doctor is content if he establish the essential fact. The doctor judges by unlike rules, because men are physiologically unlike; the lawyer by like rules, because before the law all men are equal if unlike.*

In consequence of the apparent antagonism between the professions, medical jurisprudence has been neglected. The scope of forensic medicine is so great that it discourages many from pursuing its study at all, and the remuneration of experts is so small as to offer students little inducements for qualifying themselves for such positions.

To show how little has been done to cultivate medical jurisprudence, we are informed by Dr. Gross that in 1776 there were about 3,000 practitioners in the United States, a great majority of whom had never received a medical education. Dr. Flint says, up to 1800, the five colleges then existing had not graduated over 200.

Thatcher's history of medical science says, that in 1826 the United States had 10,000 "very easily graduated doctors of medicine," and more than 15,000 practitioners without diplomas. In 1870 the United States had 63,383 practitioners of medicine. Of these there were, perhaps, 47,000 "very easily graduated doctors," and at least 15,000 quacks outside of professional ranks. Challie informs us there were, in 1876, sixty-four medical colleges in the United States (four of these for women). A report as to forty-six, the most noted, shows that twenty-one do not profess to teach medical jurisprudence. Of the remaining twenty-five, only fourteen have professorships devoted exclusively to medical jurisprudence. In five of these fourteen, students are taught to become medical experts by lawyers. The other eleven have medical jurisprudence tacked on as a caudal appendage to some of the usual branches. In short, there is but little attention given to the study of this subject, and we very much doubt if in America it ever made a qualification for graduation. Some of our law schools have professorships of medical jurisprudence, and the general facts as to medical are fully applicable to law schools, as far as instruction in legal medicine is concerned. In order to further illustrate our relations to jurisprudence, let us examine the methods which the law adopts to secure the "best attainable evidence" which in theory it demands.

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*Dr. Foster Pratt's address before the Mich. State Med. Society.

On this point we will let Prof. Challie speak:

"It (the law) entrusts medico-legal autopsies which require special medical and some legal knowledge to those having neither one or the other, except by accident, for coroners owe their position wholly to political popularity, a qualification which a competent expert is unlikely to possess. Are these unqualified officials supplied with efficient aid? If so, again by accident, since the law leaves it to chance, or to the coroner, or his still less qualified jury, to provide a medical expert, and as is usual, accident and ignorance provide inexperience and incompetence. * * * * * Besides these fatal defects in the primary legal proceedings, the Anglo-Saxon law, in order to secure the 'best attainable evidence' for its courts, clings to a method as sadly ludicrous, as it is antiquated. To plaintiff and defendant the law gives full license to summon such medical witnesses as each has already found reason to believe entertain opinions the most contradictory." Prof. Taylor says that in England "a good search and good pay can always find in attendance the witnesses needed on either side of any medical legal issue." Challie says he has personal knowledge in a suit in which the medical experts were selected by one side because of *their* well known ignorance of the special knowledge (auscultation) which the issue involved, and the judge dreaded that the whole medical testimony must be set aside because the negative evidence of the incompetent was sufficient to counter-balance the very positive affirmative testimony of competent experts.

Who are these partisan witnesses thus summoned by the law to apply the power of medical knowledge to the administration of justice. Surely these legal representatives of science must be competent experts. No. Well, experienced and educated physicians of repute? No. Then, of course, graduates; at least, some fledgling hatched in nine months and fully feathered with the plumes of every branch of medicine, medical jurisprudence included? No. Not indispensable, since, as a general rule, it has been adjudged that any practitioner of medicine (that is, any man who dubs himself doctor) has sufficient knowledge of medical science to furnish justice with its "best attainable evidence." O! this offense is rank, it smells to heaven.

Common sense would presume that laws so prodigal to ignorance and justice would provide means to test the value of scientific opinions by eliciting the facts upon which if valid they must be founded. Not so, since these opinions are replies to questions which often, by their very structure, comically prove the entire ignorance of the facts involved, for they are propounded by lawyers to whom these facts are unknown. Finally it would be presumed that the decision as to the weight due such opinions would be left to a judge or jury specially chosen. No; even this last poor boon is denied by the law.

With the power of medical science thus applied at the inquest, then prostituted by partisan opinions of incompetent experts, then perverted by advocates, and at last, when emasculated of all vigor, submitted for decision to those unable to estimate its weight, what wonder that such gross misapplication of medical knowledge brings upon it that public contempt which belongs justly to methods so monstrous, and to which true medical knowledge is a helpless, pitiable and disgusted victim.

The undersigned is of opinion that the want of proper remuneration of medical experts, not only retards the progress of forensic medicine, but is a great injustice to the witness.

To take a physician one or two days from his patients is a hardship, but one, two or three weeks, is, without remuneration, an outrage.

The undersigned has, during the last forty years, spent on an average, annually, four days as a medical witness, making in all, between five and six months' time, and never but once has he received more than his seventy-five cents a day and travel fees. In the case of the People vs. Baker and Haviland, tried in this county, for the murder of the Haviland children, he was engaged eight days before the coroner's jury and in the preliminary examination before the justice, and seventeen days in the circuit court.

On being asked his opinion as to the cause of death, he declined to give it, believing his professional opinion was property, and the State could not legally take it from him without remuneration.

The presiding judge (Graves) said: "The doctor is right; the government has no more right to take his opinion for public use, than to take an acre of land out of one of the juror's farms without remuneration, but as the Legislature had placed no funds at the disposal of the Court for that purpose, the witness must testify and bring his bill before the Board of Supervisors, who were legally competent and it was their duty to pay him a reasonable professional fee for the same."

The bill was presented and rejected upon the advice of one of their number, a lawyer.

Lawyers are always anxious to secure the services of medical witnesses, and their interests are antagonistical to ours. Our interests require payment for our services. Their influence would be abridged if the public had to pay the great number of medical experts they sometimes keep around the court, for if we had our just dues the courts would see that fewer experts were employed.

It is perfectly apparent that a reform should be had in State medicine—that our relations should be improved both for our own and the public good. Many changes have been proposed which we have not time to discuss. Among them are:

1. Special juries for special cases.

2. A medical officer to advise and assist the courts.
3. A commission chosen by mutual consent of parties and the judge.
4. A commission appointed by the court.
5. Prof. Gross recommends that the judges of the Supreme court appoint a commissioner in each judicial district, with assistants, to elicit and estimate medical evidence.

Probably the best method now in use in this country is the Medico-Legal Society of New York, embracing 400 physicians and lawyers of merit and distinction. It has by critical vigilance elevated the standard of medical experts, and in its efforts to furnish a substitute for the negligence of the State, it has appointed three medical and three legal experts as a permanent commission to investigate any medico-legal issue referred to it.

While we would insist on the thorough and constant study of State medicine by every physician and every lawyer, we believe the change adopted in New York voluntarily by the two professions is a great improvement upon any measures that have preceded it, and hope something of the kind may be adopted in Michigan.

The undersigned, therefore, recommends the passage of the following resolutions, to wit.:

Resolved, That, in the opinion of this Association, the best interests of the medical and legal professions and of the State would be benefited by the organization of a medico-legal society similar to that in New York, and by the appointment of a joint commission of experts from both professions to investigate any medico-legal issue referred to it.

Resolved, That when so organized it seek to be incorporated, with such powers and duties as the two professions with the Judges of the Supreme Court may suggest.

Resolved, That the Legislature be requested to either establish proper professional fees for the payment of medical experts, or authorize the Courts to assess and order paid the same.

All of which is respectfully submitted.

The Therapeutical Uses of Ergot.

Paper read by O. S. PHELPS, M. D., of Homer, Mich., at March meeting of the Calhoun County Medical Association.

Ergot is produced by several of the cereals, particularly rye. The diseased condition has been supposed to be occasioned by wet seasons or other climatic causes; but further investigation seems to have ascertained the fact that it is caused by the presence of the mycelium of a fungus, the spores of which may be carried to the flower through the juices of the plant or otherwise, and that a wet season is simply more favorable to the development of fungi. It begins to show itself when the germ is young—parts of the flower have a mildewed appearance, and become covered with a white coating composed of minute spore-like bodies, mixed with delicate filaments. A sweet fluid, soon becoming viscid, is exuded, glueing together the anthers and stigmas. The ovule swells till it is much larger than the healthy seed, bursts its integuments, and becomes elongated and curved. The structure is very different from the natural seed; one-half of the whole substance is fungin, and the cells contain globules of oil instead of starch. In ergot of rye about 35 per cent. is oil of ergot. Its history dates back to 1096, and attention seems to have been attracted to it by certain diseases produced by eating grain some portion of which was diseased. It was known in Germany at an early period as an oxytocic—one writer speaks of it in 1688 as being used by midwives of Wurtemburg to hasten labor. Although it was used and highly extolled by a few medical men in the seventeenth and eighteenth centuries, it does not seem to have found general favor till quite a recent date. American practitioners took the lead in the early part of the present century. Dr. Stearns, of N. Y., in 1807, Dr. Prescott, 1813, and Dewees, 1817–18, contributed to the literature of the subject as well as to introduce and recommend it to the profession. In 1824 it was introduced in England and France, but made slow progress with the profession for a while.

Its peculiar effects upon the gravid uterus seem to have first introduced it as a remedial agent. Just how its effect was first discovered is not known; doubtless by accident and upon the lower animals, abortion being produced by ergot in the grain used for the food, and some one put the discovery to practical use for criminal purposes. At least the medical profession appear to have wrested it from the hands of midwives, who had enjoyed undisputed possession of the medicine for a long time. And strange as it may at first appear, certain it is that it was consigned to a long probation before taking a fixed and permanent position in the materia medica. Yet, considering the fact that the means at that time of interchange of ideas, theories and observations were so limited, such as medical journals, medical associations, etc., together with the necessary experimenting, observing and clearing away of preconceived notions, to say nothing of the contrast between the modes and means of investigation then and now, and the long course of development necessary to make good investigators — it is not, after all, so wonderful that it has been left to the latter part of the present century to give it a stable position in therapeutic action and value. Like any powerful agent, its abuse is easy, and hence may easily follow conflicting views of its utility. That it is a powerful agent in producing contraction of the gravid uterus, there can be no doubt, and that its efficiency is in proportion to the approach of full term, seems also to be well established. Some good authorities seem to doubt its having any effect whatever in the first half of gestation to produce expulsive uterine contractions. But in abnormal conditions of the organ, we cannot doubt that its peculiar effects may be obtained at any time. The poisonous effects of the drug are thought to reside in the oil, and that deprived of the oil it produces more natural contractions, and is free from many of the dangerous effects so often seen. As to its utility in labor, everything depends upon the exact purpose it is used for. If it is used to hasten natural labor, and relieve the doctor of a few hours of waiting and the patient of considerable, not unnatural, or, perhaps, inexcusable impatience, it should be used. *never*. It would, no doubt, be "orthodox" to say that it should be given only when delivery can be effected immediately, and the indications would be: fear of post-partum hemorrhage and cessation of proper contractions, or complete inertia. While severe and fatal accidents to the mother are ascribed to its use, such as laceration of the os uteri, prolapsus and procidentia of the uterus and bladder from the violence of the contractions, inversion of the uterus, hour-glass contractions, rupture of the perineum, puerperal convulsions, and rupture of the uterus, its effects upon the child are far more constant and hence more pernicious. The sedative influence upon the fœtal heart has been shown, even when no effect upon the uterus was produced. The changes in the circulation caused by ergot within the uterus, have been examined by M. Dupond. He has shown that during the contractions of the uterus in natural labor, its peculiar murmur becomes altered in tone and fainter, and sometimes even ceases to be heard. At the same time the fœtal pulsations become fainter, until the end of the pain, when both sounds resume their normal character. The intermittent action of the uterus prevents the dangers of suspended circulation, and it is only toward the end of the labor, when the head and chest of the child are released from the grasp of the uterus, that the pains become continuous. But ergot produces continuous contractions with no intermission to allow the uterine vessels to be refilled with fresh blood, and on this ground it is charged, and no doubt rightly, with many deaths, which, had it been withheld and the forceps substituted, might have been prevented. Perhaps it would be pertinent in this connection to speak of the action of corn ergot (ustilago maidis). It is claimed for it that it does not produce continuous contraction like rye ergot, but intermittent, like those of natural labor, and that it is free from the poisonous effects of the other. That this claim is true, my own experience in several cases seems to confirm. I have given large and often repeated doses, being ready to deliver immediately with the forceps, if necessary; but while these produced strong expulsive contractions, there was always a complete intermission between each one, and as far as I have observed, there was no perceptible sedative action upon the heart. And, if future experience proves the above to be its constant action, then we have, indeed, a valuable substitute for rye ergot. Having discussed its utility in labor, we will briefly consider its further therapeutic action. Dr. Brown Sequard and others have demonstrated its power in causing contraction of unstriped muscular fibres, and to this fact its hæmostatic power is principally due, contracting the arteries, and in this way stopping the hemorrhage. The dry gangrene caused by ergotism, is produced the same way; the nutrient arteries are contracted, and the starved tissues die. Its value in certain cases of interstitial fibroid tumor is due to the same cause. Having then the key to its action, the indications for its use will readily suggest themselves.

Water Treatment for Erysipelas.

READ BEFORE THE CALHOUN COUNTY MEDICAL SOCIETY, BY
KATE LINDSAY, M. D.

Erysipelas is defined in the books as an acute febrile disease, characterized by a peculiar inflammatory condition of the surface, usually beginning at some abrasion of the skin or mucous surface. Two forms are recognized—the traumatic, treated in surgical works, and idiopathic, treated of in medical. Volkman Zuelzer and some other authors do not recognize this division, claiming that all the supposed cases of idiopathic erysipelas are in reality traumatic, the poison finding an entrance through some slight unobserved abrasion of the skin or external mucous surface.

They endeavor to prove the truth of their theory by the fact that the constitutional disturbance always depends on the extent of the local lesions.

There is a diversity of opinion in regard to the best mode of treating this disease, as well as upon most other medical subjects, some authors claiming that, like a number of other febrile diseases, it is self-limited, passing through various successive stages, and that all that can be done by way of treatment is to mitigate symptoms by the use of expectant remedies. Others maintain that although the disease is self-limited in respect to the affected portion of the body, yet by different parts becoming successfully invaded the course of the disease may be prolonged indefinitely, and that any therapeutic measures that will prevent the spreading of the local inflammation will shorten the course of the disease.

Various methods of treatment have been used and advocated for the purpose of limiting the local disease and relieving the constitutional symptoms.

The topical application of nitrate of silver on and around the diseased parts, painting with iodine and various other lotions, and some authors have even advised the use of the actual cautery around the diseased portions, tight bandaging when the disease affected the extremities, and covering the surface with collodion or a solution of gutta percha have been advised by some practitioners. Specific remedies for the purpose of destroying the poison at the local seat of the disease have been used in various forms, the most common being the hypodermic injection of carbolic acid, the external application of turpentine, camphor, &c., and fumigation by chlorine and sulphur vapors. For constitutional treatment venesection and local depletion have figured conspicuously in the past, especially in sthenic cases; purgatives, emetics, and diaphoretics have all found favor with the profession. At the present time tonic treatment seems to be coming into general favor, and quinine and iron are pretty generally prescribed by practitioners, the quinine being used both as an antipyretic and tonic. The use of water has been advocated by a number of authors, especially Hebra.

Zuelzer recommends the use of the cool or cold bath when the temperature is high, and when there are violent cerebral symptoms the use of the prolonged douche and bags of ice to the head. In those cases where the larynx is affected and there is œdema of the glottis, the energetic use of ice both internally and externally.

Having had some practical experience in the treatment of a number of cases by the energetic and almost exclusive use of water for this disease, I feel that I can speak favorably of its use both as a local and general therapeutic agent. In the prodromic stage of the disease the use of the vapor, warm full bath, or hot blanket pack is often very grateful to the patient, and besides the sedative effects, tends to increase the action of the skin and favors increased elimination. During the febrile stage the use of the cool or cold bath, cool or cold compressing and sponging, regulated by the temperature and condition of the patient, will greatly increase his comfort as well as lower the temperature. If the patient be vigorous and the local heat and irritation severe, the prolonged cold douche and local application of ice will often mitigate the symptoms and almost entirely relieve the suffering. Care should be taken, however, not to push the sedative effect of cold too far, especially when there is a great deal of œdema and the patient is feeble, as it may cause stagnation and favor destruction of tissue. If the part affected be one of the extremities, care should be taken to prevent engorgment of that portion below the diseased part, caused by the pressure from the inflamed tissue above interfering with venous circulation.

Perhaps a report of a few of the cases I have treated (or seen treated) successfully with water, will be of interest to the society.

Case No. 1, a child three years old, of delicate constitution, although never before really sick. When first seen, head and face badly inflamed and swollen, patient restless and delirious. First treatment a warm full bath of twenty minutes duration, reduced to quite cool for five minutes before patient was taken out. Patient became quiet in the bath. Local applications of hot water by means of fomentations made for fifteen minutes every hour to head and face; between the fomentations the parts were kept covered with cold compresses, changed every ten minutes. At the end of the second hour the child sank into a quiet sleep of three hours and awoke rational. Treatment continued two days longer. Child made a good recovery.

No. 2, E. A., a lady in middle life, rather robust and healthy; disease appeared in upper and middle third of left leg, inflammation of the phlegmonous variety. Disease had been progressing about ten days when first seen, and there was quite a large abraded surface on the calf; discharge acrid and purulent, inflammation still spreading, limb below diseased part very œdematous and cold; local heat and irritation so great as to prevent sleep entirely; had been using cranberry poultices and cool compresses, but not very thoroughly. First treatment, a full warm bath rather prolonged; foot became warm in the bath and marked relief of local irritation. Patient was then put to bed and the limb elevated, a bottle of hot water put to the foot, compress wrung out of ice water applied continuously, and every two hours the whole extremities were given a thorough local vapor bath of twenty minutes duration, followed by a cool spray. First night after active treatment commenced patient slept five hours. Inflammation extended no further. After about a week was able to be about and soon recovered original health.

No. 3, D. A., an old lady, rather feeble; when first seen, nose and right cheek badly swollen, pulse quick and feeble, tem. 103°, slightly delirious, very much annoyed by hot and chilly sensations. First treatment a hot blanket pack of 30 minutes duration, followed by a tepid sponge bath; for local treatment, hot fomentation over face fifteen minutes, repeated every hour, cold compresses frequently renewed between. In the evening the chilly sensations returned; pack repeated, fomentations and compresses continued. Patient rested well during the night. Local inflammation did not extend any further, and she made a good recovery. Used in this case moderate doses of citrate of iron and quinia.

Case No. 4, C. T., a person of good health, had a slight attack of erysipelas a year ago last November; patient took a light vapor bath and applied ice locally for twenty-four hours; there were no marked constitutional symptoms, and local inflammation soon subsided. About two months after the disease appeared again; it gave so little trouble before, and the patient being very busy, the case was neglected for two days. By that time the lymphatic glands of the neck were badly swollen, inflammation extending over face and scalp; constitutional symptoms well marked, tem. 105°, local irritation very severe. First treatment, a warm full bath, ice applied locally to head and face. After this about an hour of sleep was obtained. On awaking patient felt better. About this time the attendant was called out accidentally and detained five hours; cool treatment discontinued, a return of local irritation and rise of temperature to 107° followed; there was also some delirium. Next treatment a cool bath, temperature 90° cooled down to 60°; reduce temperature 3½° in forty minutes. The local use of ice, and, after œdema set in, ice alternated with fomentations, soon relieved the worst symptoms; local inflammation subsided and the case terminated favorably. Twice more during the winter the disease appeared again, but always promptly yielded to treatment, never assuming a severe form or manifesting any severe constitutional symptoms. Besides the use of water in this case various lotions and other topical applications were used without any apparent beneficial result.

Having seen and used water successfully in some sixteen other cases besides the four reported, in which it gave almost immediate amelioration of the most distressing symptoms, thus endering it always grateful to the patient, and being an agent that can be made to meet a great number of indications, I believe when skilfully used it may be made a very useful auxiliary in the treatment of this as well as other acute febrile diseases, relieving the worst constitutional symptoms by lowering the temperature and preventing rapid destruction of tissue, reducing the local heat and irritation, retarding the development and extension of the poison virus, also reducing the size of the engorged blood vessels by producing contraction of their walls, thus relieving the painful sense of distention so distressing in this disease. I feel sure that a faithful trial of this simple therapeutic agent will convince any one of its efficacy in those cases were the above indications are to be met.

The Mono-Bromide of Camphor in Insanity.

BY EDWARD C. MANN, M. D., NEW YORK,

Late Medical Superintendent New York State Em. Insane Asylum.

For some time the writer has been using this remedy in mental diseases, more especially in cases of hysterical mania in women, with the happiest results. From a long experience with its use, it has proved to be an excellent sedative of the cerebral system, and also, at times, as an hypnotic. In cases of dipsomania it has proved a very valuable adjunct to the other treatment pursued, quieting the restlessness and excessive nervousness much better than any of the other bromides. It diminishes the number of pulsations of the heart, and lowers the temperature of the body. With the exception of cases of dipsomania, the writer has used it with more success with females than with males. In one very violent case of hysterical insanity, with nymphomania, in a young unmarried lady of twenty years, a most satisfactory cure was obtained from the use of the mono-bromide of camphor, in doses of 4 grains, in capsules, three times a day, with warm baths, and the use of the constant current as central galvanization. Another case—a young lady of twenty-two years was admitted, with acute mania of very violent type, from no assignable cause. Upon her admission, the tongue was furred; the bowels constipated; heat hot; pupils widely dilated. She had hallucination of sight and hearing, and delusions relating to her lover. . She destroyed everything within her reach, and evinced great muscular strength, which rendered her a formidable patient to deal with. She was put in warm baths, and chloral and morphine were administered, but she did not sleep, all ordinary treatment proving unavailing, and a general hyperæsthesia, inducing the patient to tear her clothes off. It was determined, as an experiment, to put the patient on the mono-bromide of camphor. The doses employed were at first two grains, three times a day, and subsequently four grains, three times a day, all other medicine being, for the time, abandoned. After the first few doses, the temperature and the frequency of the pulse were lessened, and the pupils were reduced to their normal size. The patient soon began to sleep and eat, and the hyperæsthesia of the body disappeared, so that she stopped tearing her clothes off. The intense muscular restlessness, which had previously characterized her, also disappeared. The mental faculties improved, and at the expiration of thirteen weeks she was discharged, perfectly well, and has remained so up to the present time. In this case, the remedy was persisted in for over two months. In some cases where the monobromide of camphor has been used, Fothergill's solution of hydro-bromic acid has been used in connection with it, and always with the best result.

Female Physicians—The First One in America.

PAPER READ BEFORE THE CALHOUN COUNTY MEDICAL SOCIETY, BY DR. M. A. GARCIA.

The great and multiplied difficulties which every woman has been compelled to encounter in the study of medicine, has, by no means, dampened the ardor of the sex for such an undertaking. In all parts of Europe, as well as America, women are loudly knocking at the door of the college and the hospital. The university of Zurich, in Switzerland, conferred the degree of M. D. on its first female medical student in 1867, and the number of Russian women applying for admission into the college of medicine at St. Petersburg has been so numerous, that the subject was several years since brought up for discussion in the Imperial council of education. These applications have been numerous in England and in France; ladies have received appointments in hospitals and colleges, not hitherto granted. Ten native female physicians have recently graduated in India. But no country affords such opportunities to women as America. The prevalence of liberal sentiments has, of late, thrown open to them the great city hospitals and dispensaries, with their admirable clinics, and colleges, encouraged by the first medical talent of the age, have been erected, with every appliance for their especial culture. It is true, that women entered the arena of medical science through a breach in its wall, for had not the opportunity presented itself for the uneducated woman to sustain, perchance assist nature in the most natural office of midwife, we should hardly have seen any petitioning for opportunities of culture as early as the time of Agorodike. Once there, she defended her right with so much pertinacity and success, that she has retained a sort of place in it until the present day. It was in this way, and by a sacred fidelity to their painful duties, that the midwives of the early ages acquired a decisive position and influence. Not only the Sacred Scriptures, but all profane and classic authorities, Plato and Aristotle, Plautus and Terence, attest the fact that this practice was anciently confined to their hands. In Egypt and Arabia, in Chaldea and Greece, in Persia and Rome, woman ministered to woman. Greece was the first country that developed anything like a medical science or a medical school, and with this development unfolded, also, a spirit of exclusion. What did the human race gain by the change? A rash, theoretical *practice*, succeeded to patient attendance.

It is easy to see, from history, how small a number of women have devoted themselves to the science in any single century. They have done it in spite of great difficulties, and amid many oppressions. In the first efforts to gain a thorough education, in whatever direction pursued, some confusion must arise. Old landmarks will be thrown down; new ones will but slowly take their place, and the whole of society will miss, in this period of transition, that heavenly order which it always desires, but has never yet attained. Sad it is to think, that many will come up to the work unsuited to its duties, and unprepared for its sacrifices,—women who will lose their household graces in a mad ambition or a foolish notoriety. Such women are malefactors, whom no tribunal can condemn but that of the Infinite Father, who protects the beauty and truth of the moral nature. They will hinder where they cannot help; and for this trial we must be prepared. In our patience, in our strength, in magnanimous trust in God, let us await it; and let us preserve, so far as in *us* lies, a sobriety and tenderness that shall make our mission acceptable where it is not desired—desired where it was at first hardly endured.

If God has made woman unsuited to the struggles of life, no formal statutes, and no want of them, can deprive her of the sheltered niches originally hers. Leave her free, and she will learn, by trying, what she cannot do; and the bitter experience of one half century will settle the question for the race. But, on the other hand, if God intended her to walk side by side with man, where ever he sees fit to go, the movement now commencing must materially aid the civilization of the present. "Finer elements will be poured into the molten metal of society, and when the final cast is taken, we shall see sharper edges, cleaner reliefs, and finer living than we have been wont."

It is not necessary to part with the gentler graces of womanhood, when we aspire to the ability and acquisition of students; and they who act as if they thought so, cruelly wrong the sex. The classical world bitterly mourned the young Morata, but not with the broken-heartedness of the husband, whose strength and life she had always been. Clotilda Tambroni was crowned, not only with the laurels of a Greek professorship, but "with modesty and every virtue." It was the tender appreciation of the *women* of Bologna, that erected a monument to Laura Veratta, who was not only a professor of natural and general philosophy in the college, but enhanced the glory of her sex in private life and gay society. Let us revere the memory of women like Lady Jane Grey, Margaret of Navarre, Madame Boivin, and Morandi Randet, and Wittemback, Mary E. Zakrzewska, and Emily Blackwell, and, above all others, Elizabeth Blackwell, the first women in America to receive the degree of M. D., conferred upon her by the medical school at Geneva, N. Y., in 1849.

"Elizabeth Blackwell was born in Bristol, England, in 1821. Her father emigrated with his family in 1831, settled in New York, but removed in 1837 to Cincinnati, O., where he died a few months afterward, leaving a widow and nine children almost destitute. Elizabeth, then 17 years old, opened a school, which she conducted successfully for several years. Having resolved to become a physician, she obtained a situation as governess in the family of Dr. John Dixon, of Asheville, N. C., where she remained a year, having access during that time to a medical library, and receiving from Dr. Dixon some direction as to her reading. At the end of the year she removed to Charleston, S. C., still acting as teacher of music, but pursuing her studies. She next went to Philadelphia and passed six months in study under Dr. Allen and Dr. Warrington of that city. During that time she made formal application to the medical schools of Philadelphia, New York and Boston for admission as a student. In each instance the request was denied on the ground of a want of precedent for such an admission and of the impropriety of such an innovation upon established custom. She was finally, however, admitted to the medical school at Geneva, N.Y., where she took her degree in regular course in January, 1849. During her connection with the college, when not in attendance there upon lectures, she pursued a course of clinical study in Blockley Hospital, Phila. The spring after her graduation she went to Paris, and remained six months as a student in the Maternity Hospital, devoting herself to the study and practice of midwifery. The next autumn she was admitted as a physician to walk the hospital of St. Bartholomy of London. After nearly a year spent there, she returned to New York, where she has since practiced her profession with success. In 1852 she published a treatise entitled 'The Laws of Life.' In 1859 she again visited London and delivered a course of medical lectures." This little sketch would be imperfect without noticing the institution she has founded.

The New York Infirmary for women and children was incorporated in December, 1853, under the general act of 1848, with a board of eighteen trustees, among whom stand the names of Elizabeth Blackwell, Horace Greeley, H. J. Raymond and Charles A. Dana. Their first movement was to open an infirmary or dispensary in a single room, near Tompkins Square, with a capital of fifty dollars, to be attended three times a week by Dr. Elizabeth Blackwell. Three years later, reinforced by the return of Dr. Emily Blackwell from Europe, and by Mary E.

Zakrzewska, a lady of medical attainments, a hospital department was added. This last step was taken amid many fears on the part of sundry trustees and friends of the cause, lest, through the prejudice of the public, the death certificates signed by a woman should not be recognized by the authorities, and the means necessary to defray the expenses of the enterprise should fail. But the faith of woman discovered light ahead and pressed on.

The names of several distinguished practitioners were secured as a consulting board, and in the fourth year the infirmary was by the State and city placed on the list receiving governmental assistance, which official recognition was considered more valuable than the financial aid secured. In 1862 a subscription was started which resulted in the purchase of the four-story brick building, twenty-six by seventy feet, situated at 128 Second avenue, near Eighth street. The building cost $17,000, but the improvements have since doubled its market value. The society, in addition to about $1,000 annually received from the State, has recently received $10,000 from the city, which has enabled it to remove the mortgage and to lease for a term of years the adjoining building, thus greatly enlarging its accommodations. During the first five years 31,657 sick persons were treated, the greater portion being out patients. On account of their limited accommodations, but 640 were received into the house, 353 being obstetrical cases, only five of whom died, an average of one per year. The small percentage of deaths establishes the capacity of women to successfully conduct a hospital.

Their business is rapidly increasing, no less than 6,413 were treated in 1869. More than one hundred have been received into the house, the majority being obstetrical cases. The poor are furnished gratuitously with medicine, and visited at their homes by the physicians. The instruction of women for nurses and physicians, had been from the first, a leading feature in the institution, yet the managers desired to make arrangements with some medical school for the graduation of their students, and thus avoid the necessity of establishing a college. Failing to complete such arrangements, an application to the legislature for a college charter was made in 1865, and in due time granted. The course of study is rigid, lasting three years. The society performs a work of great charity among the poor, administering in times of greatest need to hundreds of widows, and to others, who, by desertion or deception, are rendered equally forlorn, and richly deserves the unstinted support of the benevolent. All honor to this pioneer college of female physicians, and to its founder, Elizabeth Blackwell.

Reports of Societies.

Calhoun County Medical Society.

The Calhoun County Medical Association convened at the parlors of the Commercial House, Albion, March 4, 1879, Dr. John P. Stoddard, President of the Association in the chair. The following members were present: Drs. J. H. Montgomery, Edward Cox, M. W. Tomlinson, Amos Crosby, O. S. Phelps, L. A. Foote, J. H. Smiley, S. S. French, M. A. Garcia, H. L. Joy, H. VanOstrand, A. M. Haight, Kate Lindsay, D. C. Hawxhurst, J. G. Millspaugh, W. J. Fairfield, Geo. H. Green, A. McD. Duncan. Drs. Wheelock and O'Donaughue, honorary members, also Dr. Eugene Smith, of Detroit, were in attendance.

Dr. Kate Lindsay, essayist for the meeting, read a paper entitled "Water Treatment for Erysipelas."

As a criticism upon what she had said with reference to the treatment formerly in vogue, Dr. Tomlinson remarked that blood-letting had not been practised for 30 years. He said that all depleting measures had long since been discontinued in the treatment of this disease.

Dr. Montgomery thought that cold applications should be used with caution—however, when the temperature reached 107° cold would be in order. He had seen disastrous consequences from the use of cold in this disease. Mention was made of a case in which the disease was rapidly spreading up the arm. Iodine, nitrate of silver, etc., had been applied to no purpose.

The disease had gone on to suppuration; the lancet had been used to evacuate the pus, and, finally, a fly-blister was applied, which was successful in arresting the further progress of the disease. Other tonic measures were employed in conjunction with the blister. He thought that quinine and tr. of iron were always in order.

Dr. Fairfield agreed with Dr. Montgomery that cold should be used with great care. He said they had used cold in the treatment of erysipelas at the Sanitarium during the past winter with success. They applied the cold only during the period of active congestion, discontinuing it when the congestion became passive, and sometimes substituting hot or stimulating applications.

On motion of Dr. Tomlinson, Dr. Smith, of Detroit, was invited to participate in the discussions of the meeting.

The secretary read a telegram from Dr. Henry B. Baker, secretary of State Board of Health, announcing his inability to be present as he had expected.

Also a note from Dr. E. Twiss, of Athens, to the same effect.

REPORTS OF COMMITTEES.

Dr. Amos Crosby, chairman of the committee on Endemics and Epidemics, read a letter from Homer, in which it was stated that a number of cases of pharyngeal disease had occurred in that vicinity, which they had diagnosticated diphtheria. In many of these cases there had been a scarlet rash, followed by desquamation of the cuticle. Dr. Crosby remarked, that in his opinion, the cases referred to were more probably *scarlatina*. A letter from Dr. Foote, member of the committee from Battle Creek, stated that upwards of eighty cases of diphtheria had been reported to him by the Sanitarium physicians, as having occurred in that vicinity, the greater number during the month of February. " The cases, with but a few exceptions, were said to have been of a mild type, the membrane appearing only upon one or both tonsils. Most of the cases were ushered in with a chill, followed by a distinct febrile action, lasting usually not longer than two or three days. The cases all terminated favorably." Dr. Foote's letter stated that no other cases of diphtheria had been reported by Battle Creek physicians, although there had been quite a prevalence of pharyngeal inflammation.

Dr. Crosby further stated, that in Albion there had been considerable sore throat, tonsilitis, pharyngitis, etc., but no diphtheria. There have been three or four cases of scarlatina in Albion. These scarlet fever cases were at first thought to be sporadic, but, upon further investigation, they were found to be due to contagion. He said, in his opinion, scarlet fever is *always* due to contagion.

Dr. Foote said it seemed to him remarkable, that so much diphtheria had occurred in the vicinity of the Sanitarium, and none in other parts of the city. Dr. Fairfield replied that the cases had occurred in that part of the city known as Canada, chiefly among the students of the Battle Creek College. Many of the students are poor, crowded together, three or four in a room; many of them have, also, had what would generally be considered a light diet. Some of these cases had been severe. In four of the cases he had attended, a distinct and quite extensive membrane was present, covering the pharynx, soft palate, etc. In making their diagnosis, they had followed the teachings of Oestel in Ziemssen's Cyclopædia. Abstracts were read by Dr. Fairfield from Oestel's article on diphtheria. They had found the micrococcus and bacterium termo in the membrane of these cases.

Dr. Crosby said he was aware that Oestel recognizes more than one form of the disease. He had had considerable experience with the disease, but had never called any case diphtheria in which there was not a distinct membrane formed, unless, perhaps, during an undisputed epidemic, where there were many typical or marked cases of the disease in the neighborhood. We should not take such liberty in the absence of any known epidemic. Indeed, at times when no known epidemic of the disease is prevailing in a vicinity, we are not justified in calling any cases diphtheria, unless they have the characteristic exudation or fetor of the disease. The prevalence of the disease in the

Sanitarium and its vicinity, and not in other parts of the city, indicates, I think, one of two things, either a faulty diagnosis or great carelessness on the part of the Sanitarium authorities as to the enforcement of sanitary laws. The matter needs investigation, and if over 80 cases of diphtheria have actually occurred in the Sanitarium and its immediate vicinity, or that part of the city under the supervision of its medical staff, and none elsewhere in the city or suburbs, and if the disease is, as claimed by the medical superintendent of that institution, a disease which may and does to a great extent originate in *filth*, then it seems to me that the Sanitarium needs cleaning out.

Dr. Eugene Smith being called upon, said he was surprised that the matter should be referred to him, as his specialty directed his attention higher up and quite to the side of the trouble in question. Some twelve years or more since, when he was in a general practice, they used to take no notice of the greyish patches upon the tonsils. He thought it remarkable that eighty cases should occur in so limited an area. His preceptor used to call such cases diphtheritic sore throat. They were what we now call follicular pharyngitis. He said he agreed with Dr. Crosby's views upon the diagnosis of diphtheria.

Dr. Green said he thought the case in hand was one where doctors differ, and " Where doctors disagree who shall decide?" He thought we were justified in calling any case diphtheria which presented the true diphtheritic type, however mild.

Dr. Montgomery moved that the subject for discussion at the next meeting of the Association be " The Diagnosis of Diphtheria."

Dr. Joy moved that further discussion of the subject of diphtheria be omitted for this meeting. Carried.

CLINICAL SESSION.

Dr. Stoddard presented a case of diseased eyelids. Dr. Smith was requested to examine the case. He made a diagnosis of chalazion and operated by laying the cyst open and evacuating its contents.

Dr. Fairfield presented a case of extensive disease of the eye, which was likewise referred to Dr. Smith. The disease was pronounced ulcerative keratitis complicated with cataract, which complication was said to be quite rare. The patient had contracted an ophthalmia two years ago—supposed to have been gonorrhœal. Dr. Smith said the present condition was one of atropy of the entire eyeball. Prognosis bad. Probably total blindness will result. Dr. Smith thought there was danger of the swollen cataractous lens causing inflammation of the ciliary body. The quicker enucleation of the eye was performed the better. If not done immediately, it should be insisted upon as soon as symptoms of sympathetic ophthalmia were present.

Dr. Fairfield also presented the case of Geo. Lawrence, resident of Maine, age 43. His case had been examined by Dr. Shaw, of Boston, and pronounced atrophy of the optic nerve. Dr. Shaw's diagnosis had been confirmed by Dr. Fairfield. Dr. Smith made a diagnosis of subacute glaucoma with cupping of the optic discs and restriction of the field of vision. He said he observed the parallax movement, but the tension at present was not above normal. Said he, the only proper treatment is iridectomy. The operation offers most in acute glaucoma. The operation is more successful in the subacute or insidious form if performed early. Of late, eserine has been used some in cases of an inflammatory type.

Dr. Foote gave the history of a case of labor complicated with puerperal convulsions. He saw the case in consultation. Had attempted to draw blood from the arm but failed. The patient died about a half hour after his arrival. He proposed cæsarian operation, but fifteen minutes or more had elapsed before consent was obtained. He then performed the operation, but was unable to resuscitate the child. The doctor stated that the child kicked lustily after the mother died.

Dr. Montgomery enquired if the operation would have been a success if done sooner.

Dr. Foote stated that there were cases on record where the operation had been a success after the lapse of one and even two hours.

Dr. Montgomery said he had performed the operation where he had waited for certain rites of the Roman Catholic Church. He attributed the non-success of the operation to the delay.

Dr. E. Cox, chairman of the Committee "On Our Relations to Jurisprudence," read a very able paper on that subject. The report was accepted, adopted and the thanks of the Association tendered.

The treasurer reported a lack of funds. Upon motion of Dr. French an assessment of 25 cents was made to cover arrears.

Association adjourned to 7:30 p.m.

A very bountiful repast was prepared for the Association by the members from Albion.

EVENING SESSION.

Dr. McD. Duncan read a paper upon "The Therapeutic Uses of Warm or Hot Water."

Dr. Eugene Smith, of Detroit, read a paper entitled "Pathological Conditions of the Eye Remediable by Optical Appliances."

Dr. Fairfield stated that he had in his possession a paper written by Dr. J. H. Kellogg upon "The Therapeusis of Cold or Tepid Water." He said if the Association so desired he would read it. The paper being lengthy, only a portion was read, the remainder being reserved for the next meeting.

Dr. M. A. Garcia read a paper with the caption "Female Physicians—The First One in America."

Dr. O. S. Phelps read a paper upon "The Therapeutic Uses of Ergot."

A vote of thanks was extended to the authors of these papers, with the request that a copy of the same become the property of the Association.

Discussion of the regular topic. Subject: "The Therapeusis of Ergot."

Dr. Cox said that he would only make a few common-place remarks. He thought there was a tendency to use the drug too much, because it was fashionable to do so. In obstetric practice he would withhold it until the os was thoroughly dilated. He would use it to check post-partum hemorrhage, in puerperal convulsions, to hasten the expulsion of the placenta when there were no adhesions, to check hemorrhage not puerperal, in abortion to expel the ovum, to check leucorrhœa, in enlarged spleen, to antagonize the action of belladonna, and in rheumatism.

Dr. Green said when ergot is applied to an abraded surface it acts as a stimulant and irritant. Internally it acts upon the ganglionic system of nerves and non-striated muscular fibre. It is one of the most valuable hemostatics we have. It will arrest nearly all forms of capillary hemorrhage. It may be used in apoplectic palsy or apoplexy. It has recently been proposed as an abortive measure in pneumonia. He had used it successfully in hemoptysis. It may be used in intestinal hemorrhage, hematuria, congestion of the brain and acute mania, often producing quiet and refreshing sleep; in hemorrhoids by hypodermic injection or by suppository, also in prolapsus ani. He thought it might be useful in any acute inflammation. It has achieved quite a reputation in the treatment of varicose veins and varicocele. It has been used very extensively in the treatment of fibroid tumors of the uterus. It is likewise used for enlarged prostate in old men, in continued doses, with great success, causing atrophy of the gland.

Owing to the lateness of the hour the discussion was brought to a close.

Dr. French moved that the appointments for delegates to the National Association be referred until after they had been made by the State society. Carried.

On motion of Dr. E. Cox, the thanks of the Association were extended to the physicians of Albion for the very hospitable manner in which its members had been entertained.

On motion of Dr. Phelps, Dr. Smith was made an honorary member of the Association.

Dr. Montgomery moved that the next meeting of the society be held at Marshall. Carried.

Adjournment.

JOHN P. STODDARD, J. G. MILLSPAUGH,
President. Secretary.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

Medical Enterprises Financially Considered.

A cotemporary remarks, "that so long as money-making is the *one* object of the great majority of medical schools, no serious effort will be made to improve the system. The *profession*, alone, can coerce the colleges into anything like decency in this regard." With equal propriety it might be said, "that so long as money-making is the *one* object of the great majority of the medical profession, no serious effort will be made to improve its status." The same remark may, with equal propriety, be applied to medical journals. The fact is, that of necessity, money-making enters into every enterprise. Were it not for the need of money or its equivalents, we doubt if any persons would take up the labor of medical teaching, medical writing, medical investigation, medical publishing, or even medical practice. The profession conducts all of its enterprises in part, as a business, and expects, indirectly or directly, to reap some pecuniary reward. Disinterested professional activity is as rare as disinterested ploughing. It is a law of the world, that the "workman is worthy of his hire," and he who pretends that he or any other person is working without hope of any substantial reward, talks moonshine. When it pays to do better work in medical teaching, medical writing, medical publishing, or medical practice, then we shall have better medical schools, better medical journals, and better medical practitioners.

He works most in the line of permanent success, who practically recognizes this fact in his writing, talking, thinking and acting. To get better practitioners, the people must be so trained as to be able to appreciate and pay for better work, and larger capital of money and brains. If it is desirable to invest ten thousand dollars and fifteen years' of hard study in acquiring a knowledge of the profession, then we must see to it that a fair financial return awaits such an investment. Otherwise, he who makes it will be greviously disappointed, and others will be deterred from a similar course. The simple reason is, that such money and time can be expended to better advantage. In the same way, to get the best medical journals, we must have practitioners who can appreciate them and pay for them. In like manner, a demand for a high grade of medical practitioners will make it remunerative for medical schools to invest such capital and energy as will secure the required result.

Perhaps scolding and wholesale denunciation are effective weapons in moving vast social forces, but, in our judgment, the most desirable results will be attained by a steady, constant effort to start and keep in motion such a current of popular thought and action, as shall ultimately revolutionize the entire popular estimate of the medical profession. When once attained, such results would be permanent, because founded upon the laws of "supply and demand,"—a sound financial basis.

In all this, we do not forget that, as members of a profession, it is our privilege to sacrifice ourselves for the good of others. But we do affirm our belief that such sacrifice will be most effective in its beneficent results when the profession is best remunerated by the public whom it serves. As to the superior virtue of either colleges, journals or practitioners, we have many doubts. As far as money goes, all are of one mind, and it is scarcely appropriate for one to berate the other for its inordinate love of gain. All want to take that which they can get just like other people, neither better nor worse. And we may add, that all need money, and far more of it than they are likely to get.

National Board of Health.

On March 3d, the President of the United States approved of the bill of Mr. McGowan, and it became a law. By this bill, a board of seven is to be appointed by the President, subject to the approval of the Senate. To these is to be added one medical officer of the army, one from the navy, and one from the marine hospital service, and one officer from the department of justice, to be detailed by the secretaries of the several departments and the attorney general, respectively. The president of the board is to be elected by its members. The duties of the board are: "to obtain information upon all matters affecting the public health; to advise the several departments of the government, the executives of the several States, and the Commissioners of the District of Columbia, on all questions submitted to them, or whenever the board may think that such advice may tend to the preservation and improvement of public health."

Arrangements are made for a full report of the work of the board to Congress. The board is also to consult with sanitarians and boards of health, and then submit to Congress a plan for a national health organization. An appropriation of fifty thousand dollars is made for salaries, and five hundred thousand dollars, or as much as is needed to carry out the purposes of the act. If only the proper men be selected to fill the positions on this board, we may look for excellent results. To secure such, may be difficult, but we trust the President to listen to wise counsel in the matter, and appoint such only as are qualified to do the work at hand. We shall hope that this board, on its organization, will speedily endeavor to work in harmony with our State boards. Especially do we hope that in the permanent organization of the board, it will be required to labor conjointly with these boards. The cause of public health has cause to rejoice in the consummation of this act of Congress. True, its office is advisory simply, but we are largely of the opinion that such advice from men such as should constitute this board, will so mould public opinion as to lead to the enactment of proper laws. Its function is largely educational. Never had teachers a better chance to mould a nation than this will have. We shall follow their work with great interest.

Kentucky, the Happy Land.

Dr. Cowling, of *Louisville Medical News*, March 22, '79, states that suits for malpractice are among the rarest legal events in Kentucky. Among the causes for this happy state of affairs, are: (1.) The temper of the people is such that they do not look for pecuniary damages for personal wrongs. He loses caste who institutes a suit for libel, slander, etc. Kentucky natives are particularly generous in their natures, and are not prone to confound misfortune with fault. (2.) Such excellent cordiality exists between Kentucky physicians, that they do not encourage or sympathize with suits against even their enemies. Hence, suits for malpractice get no encouragement from members of the medical profession. (3.) The lawyers, equally with the doctors, discourage suits for malpractice as adverse to the interests of the commonwealth and their proper relation to doctors. (4.) In practice, the profession of Kentucky do not treat fractures by the *immediate* method. In this way, it is believed that the best results are reached, and so there is less occasion for suits.

Some time since, we quoted from Dr. Sawyer, of Maine, facts that exhibited the tribulations of the profession of Maine physicians from suits for malpractice. It was very evident, from those facts, that doctors and lawyers and people regarded each other in a manner quite different from that which Dr. Cowling describes as prevailing in Kentucky. It strikes us, that the Kentucky plan is infinitely the best, and we shall, under all circumstances, advocate its adoption everywhere.

The question now arises, how was it that so different a state of things has been developed in these two sections? Surely, if this were unraveled, we might hope to inaugurate such measures as would result in the abolition of malpractice suits everywhere. In no better way can Dr. Cowling serve the profession than by entering upon this investigation, and when completed, by preaching it through the benighted regions now afflicted with such suits. Is it in the inherited blood? is it in the air, soil or other elements of climate? is it in education—scholastic or social? Should it appear that reasons purely local account for the phenomena, then, of course, there would be no hope for others, except to remove to Kentucky, as the happy land for doctors.

The Brazilian Pestilence.

While the world has stood aghast at the ravages of the plague in Southern Russia, a far worse pestilence has existed in Brazil. A correspondent of the New York *Herald* has investigated its causes and course. We are told that in a single province five hundred thousand persons have perished. In adjacent provinces fully three hundred thousand deaths have been recorded. The origin of the pestilence was in the drought, which prevailed during the winter of 1877, and continued through 1878. To the famine, was added the filth from crowds living in wretched huts. Then followed small-pox, in the summer, yellow fever—a curious paralytic disease, known as beri-beri. A mistaken public charity intensified all these diseases. Cholera appeared, and finally a disease analagous to the Russian plague.

On Dec. 10th, 1878, the death record for the day, in a province counting at that time but 75,000, over one thousand died. According to the population, this is the largest death-rate for a single day that we remember ever seeing. The great plague at London nearly reached that enormous rate.

So long has the pestilence continued, that the people have become indifferent to their danger. The Brazilian government has expended over ten millions of dollars for the relief of the sufferers. At the last it is reported that slight rain has fallen in the interior, so that we may hope that the worst of the pestilence has passed. It can scarcely spread further, as it has destroyed nearly all the material on which alone it could travel. Reports from the Surgeon General, U. S. Marine Hospital Service, confirm the foregoing in all essential particulars, as do accounts from other sources. All in all, it constitutes a picture incomprehensible in its graphic portrayal of human suffering, misery and death.

Medical Legislation.

From the Michigan *Legislative Journal* we take the following points, thought desirable in any medical bill:

Resolved, By the Lapeer, St. Clair and Sanilac Co. Medical Society, That it is their opinion that any medical bill that our Legislature can pass should have, in order to give it efficiency and permanency, and so avoid the dangers of non-enforcement and repeal by subsequent legislatures, the following, among other necessary features, viz.:

1. It should be a bill that is asked for by the people of the State and not by the medical profession, since the protection of the people is the primary object and not the protection of the medical profession; class legislation and paternal legislation being two things that are odious to the American, and especially the Western American citizen.

2. It must not recognize any pathy or school of medicine, for the reason that each of them has its adherents among the people of the State, and one man's right to his belief is as good as that of another; let the bill constitute the central examining board, with a fair representation from the three State medical societies.

3. It must not depend for its enforcement upon the medical profession, but provide for its own execution in some other way, since, although spies and informers are useful in their place, it is not thought desirable to introduce them into the profession of medicine.

4. It must not invade the liberty of the citizen, but carefully define what constitutes a doctor of medicine in such a way that vexatious prosecutions may not take place in cases where one neighbor assists another in distress,—to do that being the natural and indefeasible right of every man.

Resolved, That the L., St. C. & S. Medical Society believes that the best way to constitute the central examining board is to make our present State Board of Health its nucleus, with the addition of as many representatives from the three State societies as shall seem right and fair.

Resolved, That the society particularly remonstrates against the passage of any bill embodying either of these two objectionable features; (*a*) an examining board for each "pathy;" (*b*) registration on diploma from medical schools without *bona fide* examination or accurate and trustworthy information.

It strikes us that many of the above points are well taken, and we trust that they may be fully considered. From the aspect of matters at date of writing, it does not seem that any medical bill will be passed by the present Legislature. This is less to be regretted because there is not as yet substantial unity respecting the main features of the proposed legislation. Any successful and permanent laws in the matter must be framed with a full knowledge of every possible contingency and every possible interest.

Billings' Index Medicus.

We have received the February number of Dr. Billings' "Index Medicus," one of the grandest conceptions of medical journal enterprise of the age. To classify all the original articles in all medical publications of all countries and monthly present the list to the profession, is a service of inestimable value, one which we trust that every thinking practitioner will recognize by at once sending his subscription of $3.00 to the publisher, F. Seyboldt, 37 Park Row, New York. It will be a disgrace if this periodical suspends from lack of financial support. Whether it pays or not it will be continued for this year. Each interested in it should seek to interest others. It is a supplement to all medical journals and all medical literature.

National Medical Conventions that Gather at Atlanta in May.

These open by the Convention of Medical Colleges that is called to assemble in the State Senate Chamber of that city, Friday morning, May 2, at 10 a.m. This is followed by the third annual meeting of the American Medical College Association at the same place, at 10 a.m., Saturday, May 3. The Convention of American Medical Editors meets at 8 p.m. on Monday, May 5. Finally, the session of the American Medical Association opens at 10 a.m., Tuesday, May 6, and continues four days. We trust that even more than hitherto these meetings may advance the best interests of the profession.

Memoranda.

Evansville Medical College, February 27, graduated a class of 14.

The Medical Department of Yale College graduated a class of eight, January 30, 1879.

The Medical Department of Louisville University graduated a class of eighty-four, February 27.

Cincinnati College of Medical Surgery, February 25, graduated a class of 32.

Miami Medical College, February 28, graduated a class of 35.

Ohio Medical College, February 28, graduated a class of 103, including two *ad. eundem* degrees.

Detroit Medical College graduated a class of 29, March 4, 1879. It also conferred the honorary degree of Doctor of Medicine upon Dr. James H. Jerome, of Saginaw, Mich.

The College of Physicians and Surgeons of New York, February 28, graduated a class of 95.

Bellevue Hospital Medical College, February 27, graduated a class of 165.

The Medical Department of the City of Newark graduated a class of 205, February 18.

Columbus Medical College graduated, February 28, a class of 51.

University of Nashville, Vanderbilt Medical Department, February 28, graduated a class of 115.

St. Louis Medical College, March 7, graduated a class of 58.

Missouri Medical College, March 5, graduated a class of 88.

Woman's Medical College, of Chicago, graduated a class of 5.

Chicago Medical College graduated 35.

Rush Medical College graduated 121.

The Medical Department of the University of Pennsylvania, March 14, graduated a class of 91.

Jefferson Medical College, March 12, graduated a class of 196.

The Philadelphia Woman's Medical College, on March 13 graduated a class of 20.

Dr. C. W. Chubb (*British Medical Journal*, February 1, 1879,) reports the birth of a child weighing *twenty-one* pounds.

Dr. Don F. Pinto, says the *British Medical Journal*, for the application of a plaster of Paris jacket to a Spanish marquis, received $10,850. The ordinary consultation fee of the class of physicians to which the doctor belongs is but five *francs*.

Dr. John M. Woodworth, Surgeon General of the U. S. Marine Hospital Service, died March 14.

Prof. Alfred Stille has resigned the Chair of Theory and Practice of Medicine at the University Medical College, Philadelphia.

Congress has passed the appropriation necessary to issue the first two volumes of Dr. Billings' "Index." It has also passed a bill providing for the securing of statistics of disease as well as of mortality at the census of 1880. In this way we may hope to obtain some very valuable data as to the relations of locality, occupation, age, race and sex to the more important diseases.

Dr. J. H. Pooly, the able editor of the defunct *Ohio Medical and Surgical Journal*, says *(Medical Record)*: "The *Ohio Medical and Surgical Journal* has suspended. It was published to supply a want long felt, but that want having been succeeded by another and more imperative one—paying subscribers—the *Journal* ceases to exist."

Dr. A. Jacobi adduces elaborate proof in support of the proposition "that chlorate of potash can prove, and has proved, dangerous and fatal in a number of instances, producing a most dangerous disease—acute nephritis."

A correspondent of the *Chicago Medical Journal* says that the fashionable thing in New York is gynæcology and T. Gaillard Thomas. * * The supporters and subscribers of the Woman's Hospital are among the *elite* of the city, and aristocracy turns its eleemosynary attention to leucorrhœal disturbances with a charming enthusiasm.

Capsicum increases the secretion of saliva and of the gastric juice, favors the peristaltic action of the intestines, and so promotes digestion.

The New York City Commissioners of Charities and Correction have asked for their department, for 1879, $1,355,541. They state that a majority of the insane under their charge become so through alcoholic drink, and the greater number of this class are women. The workhouse contains a larger number of female than male paupers, and of the former seventy-five per cent. are there through drunkenness.

"When I am called in to a little patient suffering with diphtheria, I first uncover its abdomen, and when I see *recession* of the *chest walls*, I at once recommend the performance of tracheotomy."—[Dr. Charles West.

Under the title of "Neurological Contributions," Dr. Wm. A. Hammond will issue quarterly a journal devoted to nervous diseases, in the broadest sense of that term. Each number will consist of ninety-six pages, and be issued in the best style of the printer's art. The price of each number will be $1.00. Orders to be sent to G. P. Putnam's Sons, 182 5th avenue, N. Y.

Dr. J. E. Shaw (*Journal of Nervous Diseases*, January, 1879) calls attention to the fact that in three cases of meningitis, associated with middle ear disease, he was able to trace the pus along the cæserian ganglion and to the fifth nerve.

Prof. Wm. H. Byford has resigned his position in Chicago Medical College and accepted the appointment of Professor of Gynæcology in the Rush Medical College. Prof. Miller still teaches obstetrics at Rush.

Miss Moegeler, by competitive examination, has gained the position of matron at the hospital of the County Insane Asylum and Poor House at Chicago.

Horrors of war. According to *L' Union Medicale* of January 9, 1879, 129,471 of the soldiers who participated in the late Eastern war were left buried in the Balkans, and of the 120,959 Russians who were sent home sick or wounded, 42,950 died. Accordingly the number of deaths in this war amounts to 172,400, without including those who fell in the campaign in Asia Minor.

The tallest man ever actually measured was a Finlander, nine feet three and seven-tenths inches high, and the shortest man known reached a decimal under seventeen inches in his stocking feet. So says M. Broca, the famous anthropologist.

Surrogate Colvin, in his decision in the Vanderbilt will case, states that in his opinion "the testimony of the contestants' medical experts raised a stronger presumption that they were themselves irrational than that the Commodore was of unsound mind."

Dr. A. Reeves Jackson and his associates at the Illinois Woman's Hospital, have resigned. Cause: interference on the part of the lady managers. A new staff has been appointed, consisting of Drs. Byford, Nelson, Merriman, Poler, Flood and Sawyer.

Dr. C. Heitzman (*Archiv. Med.*, Jan., '79), tells us that "marriages should be allowed in doubtful cases only upon the permit of a reliable microscopist." Last season, he says, a young physician asked me whether I believed in the marriage among kindred? He had fallen in love with his cousin and his cousin with him. I examined his blood, and told him that he was a nervous man, passing sleepless nights, and having a moderately good constitution. The similar condition being suspected in the lady, marriage was not advised for fear of degenerate offspring. So great was his faith in my assertions, that he gave up the idea of marrying his cousin, offering her the last chance, viz.: the examination of her blood. This beautiful girl came to my laboratory, and very much to my surprise, I found, on examination, her blood of first class constitution. The next day I told the gentleman, "you had better marry her."

"Drunk or dying" is a phrase often appearing in English journals, and under it are detailed cases in which persons in one state have been treated as if in the other. Recently, in our own city, we have learned of a case in which a man was incarcerated in jail for drunkenness, while a *post mortem* examination, held a day or two afterwards, demonstrated a purulent meningitis. To diagnosticate such cases Dr. McEwen, of Glasgow, gives the following rule: "Any insensible person who, having been left undisturbed for from ten to thirty minutes, has contracted pupils which dilate when he is shaken, without any return to consciousness, and then contract again, is suffering from alcoholic coma."

Editor's Book Table.

Any Book noticed herein may be had of E. B. Smith & Co., Publishers and Booksellers, Detroit, Mich.

*HEALTH PRIMERS.—Each of these primers occupies about one hundred pages. They are prepared by men worthy of the fullest public confidence. Their object is to present facts pertaining to health in a brief, simple and elementary manner, so as to furnish a guide for grown-up people. They are intended to supplant the cheap and untrustworthy compilations of incompetent persons. We have examined them with much care and find that they are admirably adapted to accomplish the end proposed. We sincerely hope that they may have a large circulation among the laity. Though prepared for the non-professional public, members of the profession will find their perusal both interesting and profitable. Alcohol, its use and abuse, is admirably discussed. Dr. Greenfield concludes:

(1) In *health*, the use of alcohol is unnecessary, and its habitual employment is liable to produce disease; hence total abstinence is the safest course.

(2) When the *habitual* use of alcoholic beverages in some form is found necessary, the following rules are to be observed: The *quantity* must be the least possible, and usually not more than that containing half an ounce of absolute alcohol per dram. The *form* should always be diluted, and the alcohol in a state of intimate combination. Wines containing more than 10 per cent. of alcohol should not be drunk undiluted. The *time* should always be with meals, preferably only with dinners; never in the morning or between meals.

(3) In very many cases where alcoholic beverages may be used temporarily with advantage, no definite rules can be laid

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*No. 1. Exercise and Training. By Dr. C. H. Ralfe.
No. 2. Alcohol; Its Use and Abuse. By Dr. W. S. Greenfield.
No. 3. The House and Its Surroundings.
No. 4. Premature Death; Its Promotion or Prevention. 1879. D. Appleton & Co., New York. Price 50 cents.

down. But let the dangers, moral, social and physical, of excess in drinking always be borne in mind, and control the action in this matter.

(4) In *disease*, alcohol should be used only as a medicine, and the quantity, quality and time strictly regulated by the doctors.

There can be no doubt but that the above rules, and the principles upon which they are based, are essentially correct, and their universal observance would prevent countless human wrecks which are now seen as the result of excessive drinking of alcohol.

The essay on the "House and its Surroundings" is full of common sense too generally forgotten or unknown to the builders of houses and their owners. Faulty or unsanitary house constructing is a powerful factor in the causation of disease. The shanties or log huts of the pioneers usually permitted the escape through the doors, windows and cracks or large fire place, of the animal and vegetable poisons generated within their walls. But the modern brick mansion effectually keeps within, for the use of its occupants, all their animal exhalations, the poisonous gases arising from fires and lights and sewers. Not only is foul air brought into the house, but it is locked in by double windows, weather strips, etc. It is a very complicated problem to build a house so that every room shall, at all times, contain pure, healthy air. Such a house is possible, but it is very rare to be found among the well-to-do or wealthy classes. It is hoped that this essay may be so studied as to at least call attention to some of the practical ways by which the house and its surroundings may become the source of life instead of death

The essay on premature death, its promotion or prevention, is sufficiently faithful to the truth to be very startling even to the most indifferent. Thus it appears that at least *nine-tenths* of all lives are cut short before their natural term has expired, viz., seventy years. Four-tenths of all deaths take place before the fifth year is completed. The other deaths are distributed pretty evenly over life from five years to seventy. Preventive medicine so-called rests on our knowledge of the cause of deaths under seventy years, and the conditions under which these causes operate, and the extent to which both causes and conditions may be removed. The causes of premature death are almost infinitely varied. As operating at different ages, we find: In infancy diseases of the brain and nervous system rank first among the causes of death, diseases of the lungs have the second place, and diarrhœal diseases the third. From the end of the first year to the end of the fifth year infectious diseases, as scarlet fever and whooping cough, give rise to the greatest mortality; then next in order of mortality lung diseases, and lastly diarrhœal diseases. From five years to fifteen the infectious diseases are the chief causes of mortality. From fifteen years to twenty-five, phthisis is the most important cause of death, and infectious diseases next. From twenty-five years to thirty-five, phthisis still remains the first cause of death and infectious diseases the second, but there is an increased mortality from diseases of the lungs other than phthisis. From thirty-five years to fifty-five, phthisis is still first as a cause of death; second are diseases of local origin, especially of the brain and nervous system, of the heart, blood vessels, and digestive organs, and cancer; the infectious diseases occupy a low rank as causes of death. From fifty-five years to seventy-five, diseases of local origin are the chief causes of death. Thus it appears that the fatal diseases of infancy are significant of the immaturity and mobility of the infants' organs and functions. The fatal diseases of childhood are mostly due to exposure to morbific agencies current among populations, as the catching diseases. As manhood is completed we have the diseases indicative of local degenerations of tissue. At each following stage of life the predominance of these diseases is more marked. In old age, degenerative changes appear as the natural consequence of decay, and death follows as a physiological fact. The body, like the "deacon's one-horse shay," goes to pieces all at once.

From these quotations it will be seen that the scope of these primers is such as to fit them for a useful mission among the people, and we trust that our readers will do what they can to encourage their study by the intelligent heads of families under their charge.

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*This work is a very readable account of the special features and conditions of the sailor's life. The author's experience in the navy is freely given in order to more graphically portray the modifications in modes of living peculiar to the naval service. Without being profound, or philosophical, or scientific, or exhaustive, it still constitutes a hand-book of great practical importance to sailors, and especially those connected with the navy, and to all students of human physiology in its widest sense. The style of the book is based on the supposition that it would be read by the non-professional quite as much as by the medical man. One of the diseases occuring among sailors is home-sickness or nostalgia. It has its origin in affection for the mere locality of our childhood. The thought of home becomes a fixed idea—the absorbing thought that occupies the whole soul to the exclusion of all other thoughts. The individual affected is shy, the countenance becomes stupid, sad and pale, with dark shades about the lusterless eyes. The heart palpitates and tends to syncope. The patient conceals the cause of his distress even though he be aware of it. The disease is easily discovered by the phenomena following some questions about home. The rapid pulse, the blushing and fainting tell it all. With these symptoms nostalgia is a serious disease. Post-mortem examinations have revealed large quantities of purulent matter about the surface of the brain. Special directions are given for the prevention of the disease. The only treatment when once the disease is fully developed is to send the patient home. As illustrating individual preferences, he quotes the expression of Prof. Chapman, of Philadelphia, viz.: "The Yankee likes pork and molasses, the Virginian is fond of bacon and turnip tops, the Pennsylvanian likes sourcrout and goose, and

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*Natural Hygiene; Human Health and the Means of Preventing Disease. By Joseph Wilson, M. D., Medical Director U. S. Navy. Second edition, with illustrations. Cloth; pages 274. 1879. Philadelphia: Lindsay & Blakiston.

these are good and wholesome food for those who like them and greatly appreciated by convalescents sometimes, though the very thought of them be really nauseating to nine-tenths of mankind." These quotations will give some idea of the style of the work. The illustrations of the rarer plants used as food in the service serve to elucidate the descriptions. The publishers have done their part with their usual good taste.

*Like all the productions of its distinguished author, this is a scholarly work. In an historical chapter he shows that under various forms this disease has a written history coeval with that of medicine itself. Its exciting cause he describes as probably "minute particles of matter which are capable of floating in the atmosphere and attaching themselves to rough surfaces." That these minute particles of matter are fungi he does not regard as proved. It is admitted that such organisms may play an important part in the propagation of disease by acting as carriers. Since 1863, the author has steadily maintained the identity of croup and laryngeal diphtheria. In the present volume the evidence is again fairly presented. He shows that the boasted pathological differences have been proved a myth, while the cause, course, history and treatment is the same. Such was the conclusion that we reached after our first study of the matter, but we are glad that the matter is so fairly and forcibly stated. It is unnecessary that we quote further from the volume. Unhesitatingly we commend it to all who have an interest in the study of this affection as a capital monograph, the best that we have met on this subject.

†We gave so full an account of the Buffalo meeting that at this late hour it is hardly necessary to notice at length this volume, especially as the next meeting takes place the first week

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*Diphtheria; Its Nature and Treatment, Varieties and Local Expression. By Morell Mackenzie, M. D. Cloth; pages 100. 1879. Philadelphia: Lindsay & Blakiston. Price 75 cents.

†The Transactions of the American Medical Association. Vol. xxiv. 1878. Cloth; pages 1145.

in May, 1879. In addition to the transactions proper, we have a prize essay covering 245 pages. The subject of the essay is "The Surgical Anatomy and History of the Common, External and Internal Carotid Arteries, and the Surgical Anatomy and History of the Inominate and Subclavian Arteries." It contains an analysis of 173 dissections of these surgical regions of the neck, and a collection of 1,198 cases in which the results of deligation of these vessels are given with other useful data. The author is Dr. John A. Wyeth. Elsewhere we shall give some abstracts of the results thus reached. On the whole the volume exhibits an increasing vitality in the American Medical Association, auguring well for the future growth of the profession in America.

*Of a former edition we wrote: "In it is condensed the fruit of twenty years of large and accurate clinical observation. Its style is clear, concise and interesting." The same remark is still true, if we add that increased study and observation by the author and others is so blended with the former as to bring the entire work fully abreast the present times. A work stripped of all theory, all speculation, and presenting only a crystallized account of the essential features of gynæcology, has a positive value, as shown by the numerous editions of this. To those who desire such a book this is most cordially commended.

†Fully half of this volume is devoted to animal chemistry. Of this we may remark, first, that all and more may be found in the best works on physiology and in a more natural connection. Thus the natural composition of saliva, gastric juice, etc., are here presented away from their relation to the salivary glands,

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*Clinical Lectures on Diseases Peculiar to Women. By Lombe Atthell, M. D., Master of the Rotunda Hospital, Dublin. Fifth edition, revised and enlarged. Cloth; pages 340. 1879. Philadelphia: Lindsay & Blakiston.

†Medical Chemistry; Including the Outlines of Organic and Physiological Chemistry, based in part upon Riche's Manual de Chimie. By C. Gilbert Wheeler, Professor of Chemistry in the University of Chicago Cloth; pages 424. 1879. Philadelphia: Lindsay & Blakiston. Price $3.00.

stomach, etc., and their functions in connection with other parts of the body. We were surprised to find no allusion to the separate ferments constituting the substance formerly called pancreatine. On the whole, however, the facts are correctly stated and concisely. Concerning organic chemistry so little is given that a clear idea of the topics treated is hardly attainable. For a general student the work may possess a decided value, but we are quite certain that it is not suited to the needs of any class of medical students or medical men. A good work on medical chemistry, adapted to the wants of medical students, is greatly needed. The publishers have executed the volume with their usual taste.

*In this volume attention is solely directed to personal matters under individual control. No mention is made of public hygiene. We have perused the volume with interest. Much is stated that is true and wise, but it is blended with much verbiage more or less unmeaning. The book is such as we would expect from a man of moderate attainments, a gift of talk and fair sense, who sits down and writes out his ideas without careful study of every point in the light of modern science. It does not represent at all our present knowledge on the subjects of which it treats. Such, at least, is our estimate of it. We regret that such an important subject is so inadequately treated. Avowedly written for the people, it may do some good, but not a tithe of the good such a work should accomplish. Preventive medicine is now a fashionable topic, and I presume that we shall have a large number of books of questionable excellence on various branches of the subject.

*Health and How to Promote It. By Dr. Richard McSherry. Cloth; pages 179. 1879. D. Appleton & Co.

*Having had extended opportunities for studying yellow fever during the epidemic of 1878, Dr. Summers now gives the results of such study. In order he discusses the disease in its etiology, pathology, clinical history, treatment and prophylaxis. He believes that while yellow fever may have been originally an imported disease, it is now no longer so. It has now become modified by the external conditions under which it has been subject, so that it now originates in our country. In view of this any general quarantine is preposterous. Again, as quarantine can never be perfect, it is impracticable. The best prophylaxis is to remove at once from the infected districts. As to the origin and causes of yellow fever the author affirms that, (*a*) It is a zymotic or fermentative disease. (*b*.) It does not depend upon a specific germ. (*c*.) It is ushered in by a train of intensified malarial influences which gradually glide into the specific fever. (*d*.) It depends for its development upon atmospheric relations of heat and moisture. (*e*.) It is not a contagious but an infectious disease. (*f*.) It is a disease which may at any time spring up in southern latitudes indigenously whenever the atmospheric conditions are favorable. The black vomit he regards as the excrementitious matters of the bile which exude when the liver is not secreting at all, mixed with broken down liver substance, mucus, highly acid gastric juice and altered blood, whenever the disease takes on the hæmorrhagic tendency. To any interested in the study of this disease we heartily commend this little work.

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†The classification is by subjects and authors. The work is well done and worthy of the fullest encouragement. Every practitioner that takes more than one American journal should possess this very convenient and handy index.

*Yellow Fever. By Dr. Thos. O. Summers. Cloth; pages 72. 1879. Nashville, Tenn.: Wheeler Brothers.

†Index to Original Communications in the Medical Journals of the United States and Canada for 1877. Cloth; pages 48. Compiled by Wm. D. Chapin, 309 W. Twentieth street, New York City. Price $1.00.

Abstracts from Exchanges.

PREPARED BY JUDSON BRADLEY, M. D., ALBERT B. LYONS, M. D.,
E. A. CHAPOTON, M. D.

Practical Medicine.

SYPHILITIC PNEUMONIA.—Dr. Sachayin, of Moskan, made some observations on this disease. The *non-complicated* form of the disease will be recognized: by its characteristic history; by the strong constitution of the patients (weak individuals with a tendency to phthisis, will early become a prey of this disease, while pneumonia must be regarded as one the later syphilic affections); by the objective signs of solidification of the lungs, deepening of the supra and infraclavicular grooves, dyspnœa, pain in the chest; by the absence of hæmoptysis, cough, sputa, bubbling and fever, and last, by the curative action of mercury and iodine.—*Virchow's Arch.*, vol. 75, Jan., 1879.

APOMORPHIA IN EPILEPSY.—Dr. E. Vallender (*Berlin Klin. Wochenschrift*, No. 14), brings to notice three cases of epilepsy, in which he succeeded in lessening, more or less, the intensity and number of epileptic attacks, by the hypodermic injections of one-third syringeful of a 1% solution of apomorphia. The observations of Riegel induced him to try the cutting short of the attacks of epilepsy.

In the first patient, where the attacks were often repeated 15 times in 24 hours, an aura started from the epigastric region, and in a few minutes the attack followed. During the aura, injections were made as often as possible. First, the attacks became less severe, and their number lessened, so that finally, during the last eight weeks no symptoms have shown themselves.

In the second case, the aura (dizziness) only preceded the attacks a few moments ; it was, therefore, difficult to inject at the right moment; still the severity and number of seizures were greatly diminished. Finally, he had a woman under treatment, where the aura, which started at the toes, preceded the attack

15 minutes. In this case, every injection made in time, prevented the epileptic seizure without fail.

It therefore appears that the success is the more certain, the longer the aura lasts, or the apomorphine is injected before the attack.—*Med. Chirurg. Rundschau.*

ON THE RELATION OF HYPERTROPHY OF THE HEART TO KIDNEY DISEASES.—When, in cases of kidney diseases, there is observed hypertrophy of the heart, combined with valvular disease, the hypertrophy is considered as the compensating consequence of the valvular disease, and hardly brought into any connection with the kidney disease. More difficult is the explanation of hypertrophy of heart, without any complication of valvular disease. Some have considered this form as the sequence of mere mechanical influences; others, as one of the chemical changes (retention of urea in the blood). Indeed, there is found urea in the blood in cases of chronic parenchymatous nephritis and of diffuse nephritis, but not in cirrhosis of the kidneys, except in its last stage. Now, in chronic parenchymatous nephritis, there is rarely found hypertrophy of the heart; and if it occurs, it will be eccentric, while in chronic interstitial nephritis (with *no change* in the condition of the blood), there is commonly observed hypertrophy of the heart, and mostly the simple or concentric form of this. Besides, there is thickening of the walls of the small vessels in the latter affection, which is never found in chronic parenchymatous nephritis.

From all this, it appears evident that in different forms of nephritis, the hypertrophies of the heart are of an unlike nature, and must be caused in a different manner. Uncomplicated hypertrophy cannot cause an increased tension in the vessels. When we find such, as in chronic interstitial nephritis, it can be caused only by a thickening of the walls of the arteries, which accompanies the hypertrophy of the heart (as in cirrhosis of the kidneys).

According to our present knowledge, we must then consider the disease of the kidneys simply as the *sequence* or an accompanying phenomenon, and *not as the cause* of the increased tension in the vessels.—*Dr. H. Senator, in Virchow's Arch.*, vol. 73, July, 1878.

LEAD POISONING—ITS LESIONS.—Dr. Friedlænder, of Strassburg, examined a case of lead poisoning, that led him to the following conclusions: Lead causes a functional disturbance of the muscles, to which is added a disturbance of nutrition, shown in a proliferation of the nuclei, and a diminishing of fibres. As probably *secondary* symptoms, he considers further degeneration of muscle fibres, which is followed by a peripheral paralysis and a rapid atrophy of the muscles. The fact that especially the extensors become affected, cannot be explained sufficiently by him, but he thinks, with Fischer, that lack of nutrition may be one of the causes.—*Virchow's Arch.*, vol. 75, Jan., 1879.

YELLOW FEVER—STILLE.—Prof. A. Stille (*Medical Record*, Mar. 18, '79), in quite an elaborate lecture, endeavors to establish the following: (1) Yellow fever originated nowhere but in the West Indies. (2) Its morbid poison is conveyed elsewhere in ships and fomites. (3) Wherever conveyed, a high temperature is essential to its propagation. (4) A strict quarantine is always efficient in preventing its dissemination. (5) It is not contagious. (7) Its essential cause has not been isolated or defined, but it must be assumed to be a specific poison. (7) This poison in the system acts primarily in two ways: first, by disintegrating the blood and inflaming the stomach, and secondly, by impairing the eliminating function of the kidneys.

TYPHOID FEVER—ITS ANTIPYRETIC TREATMENT.—Dr. G. C. Smythe (*Amer. Pract.*, Jan., '79), in an elaborate article, seeks to establish the following views: (1) It is probable that the so called *typhoid condition* is the result of persistent elevation of temperature. (2) The most important indication of treatment is to keep the patient cool; hence, the hourly use of the thermometer is indispensable. (3) The best means for lowering temperature are: cold water baths and quinia. In the first week of the disease and before quinia has been given, a bath may be required as often as every two or three hours. After the patient has been thoroughly cooled with the quinia, three or four baths per day will answer, and a still less number later in the disease. The "gradually cooled" bath seems to be preferable. (4) Quinia is the more valuable agent of the two, and can be used at all stages of the disease, while the baths seem to annoy some patients, especially during the third week and the latter part of the second. Frequently, no other treatment is necessary for two or three days after a full dose of quinia. In the later weeks of the disease, the amount of the remedy can be materially lessened. It always moves the bowels several times the following day, its administration lessening the tympanitis; and the unabsorbed portion thoroughly disinfects the discharges, thereby contributing largely toward preventing the spread of the disease.

HIRSCH ON THE RUSSIAN PLAGUE.—Prof. Hirsch, the great German epidemologist (*Brit. Med. Jour.*, Feb. 15, '79), traces the historical lines of this pestilence, showing that it was brought to Russia from the Persian town of Rescht, on the Caspian. He shows that the characteristic of the present disease, is an inflammatory affection of the lungs. It is the same form of bubonic plague that was observed in the beginning of our century in some parts of the East Indies, and which, in the fourteenth century, swept over the whole of civilized Europe, and afterwards disappeared.

From the descriptions of this fearful calamity, which were compiled at the time and still exist, we gather that the principal symptoms of this affection were the same which are observed in the present epidemic, viz.: affection of the lungs and buboes. He thinks that the real cause of the disease in the plague, is a blood poisoning, which produces not only very serious general typhoid symptoms, but also localized ones, especially in the lymphatic glands, either externally, as buboes, or internally, in the retroperitoneal glands and the spleen. The follicles of the intestine, however, are never affected as in typhoid fever. The illness lasts from three to five days, but it may end in death in twenty-four hours. As to its diffusion, he does not regard it as belonging to the group of contagious diseases, where the virus is reproduced in the affected organism, but to the zymotic group, where the virus may be propagated, either through some object or an individual, but can only be developed if it fall on a certain soil.

His reasons for this view are: (1) The disease only breaks out at certain seasons of the year, as it appears in autumn, lasting through the winter, and disappears at the beginning of the warm season. (2) It is confined to particular districts. (3) The number of medical men affected by it is much smaller in proportion, than it is in epidemics of truly contagious diseases.

ENEMATA IN DISEASES OF THE COLON—TWO METHODS.—Dr. Dubois (Schweiger, corres. Memor. *London Medical Record*, January 15, 1879,) makes the following practical remarks on the use of enemata in diseases of the colon: (1) Simple enemata are used in cases of constipation when it is found necessary to remove fæcal masses from the sigmoid flexure, the cœcum or the rectum, in cases where the mucous membrane of the rectum is diseased, and it is indicated to bring it in contact with water or medicine. (2) Very large enemata will often be found efficient in cases where the water ought to be injected high up into the large intestines, or whenever there exists a catarrhal affection of these portions of the intestines. Some patients can bear, without incurring pain or danger, enemata of 1,000 to 1,500 cubic centimetres of water; but in others such a large volume of fluid would either prove very dangerous to the intestines, or could not be injected on account of the great irritability of the intestinal muscles. In such cases, where it is of obvious necessity to inject a large bulk of fluid, the author advises the following method: Tepid water is injected till the patient feels a violent strain. The syringe is then removed, and the patient slowly changes, under the bed clothes, from his side to crouching on his knees and elbows. After one or two minutes the former position is again assumed for a short time, and then the patient lies down upon his back. The same operation and changes of posture are then repeated, and defecation generally ensues in about ten minutes or half an hour after the injection has been given. This last method is indicated (a) in cases of constipation, where purgatives and the usual enemata either cannot be given or have proved powerless: (b) in cases of coprostases, where fæcal tumors, varying in size, can be felt in the cœcum or other parts of the large intestine, and have sometimes been mistaken for ovarian cysts—here purgatives given by the mouth are either vomited or have no effect: (c) it is well known that inflammations of the vermiform process are mostly caused in healthy individuals by accumulation of fæces; whenever, therefore, a slight tenderness and increased resistance are felt in the iliac region, especially in persons who have suffered from typhlitis before, a bulky injection will be found very useful in preventing the inflammation and removing the fæces; narcotics also should be used in these cases: (d) in cases of general or local peritonitis, when constipation and accumulation of gases in the abdomen have been produced by paralysis of the intestinal muscles: (e) in cases of diarrhœa, caused by obstipation or accumulation of fæces: (f) in abscesses of the intestines, dysentery, etc.

Diphtheria—Its Nature and Relations.—Dr. O. Whitney *(Med. Surg. Reporter*, Jan. 18, '79), gives the results of an elaborate study of this affection, viz.: (1) There is but one pseudo-membranous disease. (2) It belongs to the same family with influenza, which may, by the same nomenclature, be called the mucous disease. (3) Both are inflammation of the mucous membrane lining, the nares, throat and primary passages to the lungs. (4) The "flux" or product in influenza is innocuous, and not capable of self-propagation. (5) In the pseudo-membranous disease, the flux is concrete, and has self-generating powers. (6) Both branches of the family have prevailed from time immemorial, and are governed by the same general causes and influences, and modified by the country in which they may have prevailed and individual habits of the people. (7) It is contagious or infectious in proportion to its visible putridity in individual cases, the infecting power being of short duration. (8) As in influenza, one attack of the pseudo-membranous disease gives no protection against a future attack. (9) Both branches of this family of diseases have had a great number of names;

membranous croup, putrid sore throat, membranous laryngitis, cynanche trachealis, cynanche maligna.

Ergot in Trichinosis.—Dr. Rhode, in the Berlin *Klin. Wochenschrift*, states that he accidentally discovered that the free administration of ergot, especially of ergotin hypodermically, is a speedy and positive curative agent in trichinosis. In one case eight grammes of ergotin effected a speedy cure.—*National Medical Review.*

Hydrophobia Cured by Oxygen.—(*National Medical Review*, Jan., 1879—*Lyon Medical)*, reported by Drs. Schmidt and Zebden, Russia. The first symptoms of rabies appeared seventeen days after the injury or bite. The patient was made to inhale three cubic feet of oxygen, and two hours afterward he was in a state of perfect calm. Two days afterward, the symptoms of rabies reappeared, and another inhalation of oxygen was administered with the same success. Inhalation continued forty-five minutes. After this, a slight dyspnœa was treated with mono-bromide of camphor.

Iodine as an Antidote for the Poison of the Rattle-Snake.—Dr. J. R. Haynes (*Cincinnati Medical Advance*, Feb., 1879), experimented with tinct. iodine as an antidote for rattlesnake bites. A large rat got five drops, well diluted with water, hypodermically, after the snake poison had paralyzed him. In two hours he seemed as well as ever. After twenty-eight hours, the rat was dismissed, with a notch in his ear, so that he might be identified if again seen. A kitten was bitten by the snake, and got five drops of the tincture, hypodermically, after the paralysis had affected the extremities and the diaphragm. In two hours and a half, the kitten seemed well and lively as ever.

The doctor himself wounded his finger, accidentally, and afterward dissected a rat that had been bitten by the snake. Soon his finger swelled and became painful, but a single dose of six drops of tinct. iodine, in a third of a glass of water, did the cure.

[Very good for a snake story; but how much iodine will be required to cure a man of a snake bite, if a rat requires five drops of the tincture ?—Ed.]

AUSCULTATION OF THE ARTERIES. —Matterstock (*Deut. Archiv. für Klin. Med.*, *Boston Medical Journal*, March 6, 1879,) presents as the result of his observations the following summary: (1) In mitral disease there exists in the majority of cases a diastolic murmur, that is, with arterial expansion, in the carotid and sub-clavian arteries, usually of a soft, blowing character. This may be due to an irregular movement of the blood, in consequence of diminished filling of the artery, or may be produced in the neighboring distended vein by the intermittent pressure of arterial expansion. (2) The systolic murmurs heard in the pulmonary area in various diseases are often propagated with striking intensity into the left sub-clavian and even into the axillary artery. The same is true of the pulmonic second tone. In like manner the auscultatory phenomena of the aortic orifice stand in intimate relation to the arteries of the right side. (3) A murmur may be produced simply by pressure in all accessible arteries under the most varying conditions. (4) A *tone*, also, may be produced artificially by pressure in all the large, compressible arteries into which a small quantity of blood may be thrown by quick ventricular contraction. (5) This pressure tone is due to the vibrations both of the arterial wall and the fluid. (6) The double murmur is also produced by pressure. (7) In most cases the second half of the double murmur is due to centripetal movement of the blood. (8) The re-duplicated diastolic arterial tone is for the most part produced by a double contraction of the ventricle. (9) The double tone may be found in all possible conditions, and is at least in most cases to be considered merely as a consequence of the katadicrotism of the pulse. (10) Cases of considerable aortic stenosis are distinguished above all other valvular affections by a want of the double murmur and pressure tone.

THE DETROIT LANCET.

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Original Communications.

Inhalations in the Treatment of Pulmonary Diseases.

BY F. H. DAVIS, M. D.

Arguing from analogy of structure alone, catarrhal and inflammatory affections of the mucous lining of the lower air passages should respond to local treatment with the same promptness and success as do the similar affections of the nasal, pharyngeal or laryngeal tracts. An extreme sensitiveness and an intolerance of local medication is, however, manifested by these deeper portions of the respiratory tract, which, together with their inaccessibility, renders the adaptation of an efficient local treatment extremely difficult, and, in fact, except as applied to a limited range of cases, altogether impracticable. The physiological function performed by the respiratory organs must be maintained as a steady, continuous, uninterrupted process, commencing with the birth of the individual, to cease only with the cessation of its life. In case of disease or injury, we cannot, as in other portions of the system, place the parts at rest in order to favor recovery; neither can we utilize any form of treatment calculated to interfere with the respiratory process.

The lungs are so constituted as to carry on this function—to absorb the oxygen necessary for the aeration of the blood and to throw off the carbonic di-oxyd and other excrete products—only in the presence of pure atmospheric air. The admixture with this respired air of any medicament, either in solid, liquid or gaseous form, interferes with, and endangers the efficient maintenance of this most important and necessary physiological process. The entrance of such irritant material into the air passages is resisted by an involuntary effort at expulsion, a spasmodic cough, excited as a reflex result of the irritation of the laryngeal and bronchial nerves. This spasmodic irritability can be overcome by such agents as exert either a locally quieting effect upon the laryngeal and bronchial nerves, or a benumbing, anæsthetic effect upon the nerve centers which receive and reflect these impressions. Of this latter class of agents, æther, chloroform and carbonic acid gas are prominent examples. When inhaled, they are absorbed into the system and exert an anæsthetic effect upon the nerve centres, and are consequently of use only where a temporary asphyxia and the consequent insensibility is the object aimed at. To utilize the absorbent surfaces of the respiratory passages for the introduction of medicines into the system, except thus for purposes of anæsthesia, has, we believe, proved impracticable. Treatment adapted for immediate local effect upon the respiratory mucous membranes, can, however, be made to afford a most efficient, satisfactory, and much needed assistance in the relief of certain pathological conditions of the deeper air passages.

For purposes of inhalation, remedies must be presented in one of three forms: either as a gas, as a vapor, or as a liquid diffused through the air in a pulverized or spray form.

Of the various gases, oxygen, chlorine, carbonic acid, etc., which have been used in the treatment of pulmonary diseases, none have stood the test of time and experience, having failed to accomplish practically the results which, theoretically, had been expected from them. As between the vapor and the spray forms of inhalation the latter has proven the more efficient and better adapted to the treatment of the nasal, pharyngeal and superior laryngeal tracts, chiefly on account of the wider range of medicines available for use in this form. When it is desired to reach the deeper bronchial and pulmonary passages, a vapor inhalation, properly diluted with, and diffused through, a warm moist air, will be found to penetrate the most readily and to excite the least reflex irritation. This is what is generally known as the hot water or steam form of inhalation; the medicines being dissolved or suspended in water maintained at about

150°, and the warm steam and vapor of the medicine thus inhaled together.

The principal points necessary to a good instrument for the administration of this form of inhalation are, first, that it should be of sufficient capacity, holding at least one quart; secondly, that there be provision for the passage of a free, abundant current of air down through the solution and out at the top through the inhalation tube. The instrument must also be calculated to withstand heat. The *Eclectic Inhaler*, manufactured in London, under the direction of Prof. Morrell Mackenzie, meets all of these indications perfectly, but, as imported into this country, is held at a price which renders it unavailable for patients' use. We have had in use by our patients for some time past a tin inhaler modeled after "the eclectic," and provided with valves which enable the patient to both inspire and expire through the tube. I direct the expiratory valve to be partially obstructed, so as to necessitate a slow and somewhat forced expiration on the part of the patient. This accomplishes two purposes: first, a certain degree of full, forcible expansion of the lungs is obtained, producing effects similar to those resulting from the inspiration of compressed air; and secondly, the inspired vapor is retained longer in contact with the respiratory surfaces. This latter factor, I find, increases very markedly the effects obtained from inhalations as applied to the* deeper respiratory tissues, while the simple inhalation of the vapor followed by the immediate free exhalations is sufficient where only the pharyngeal or laryngeal regions are to be impressed.

In the acute inflammatory or catarrhal affections of either the upper or lower air passages, moist vapor inhalations are contra-indicated on account of the avidity with which, under these circumstances, all excess of moisture in the respired air is absorbed by the inflamed mucous membranes, resulting in submucous, œdematous infiltration and consequent obstructive swelling. This principle applies equally to either a fresh, new disease or to an acute exacerbation of a chronically existing catarrh.

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*These Inhalers are for sale by D. R. Dyche & Co., State and Randolph streets, Chicago. Retail price, 75 cents each.

In that form and stage of chronic bronchitis characterized by an excessive purulent or muco-purulent expectoration, an inhalation of steam impregnated with the vapor of carbolic acid and camph. tincture of opium will be found to afford prompt relief to all of the immediate symptoms, the carbolic acid acting as an antiseptic, while the moist warmth and the opiates allay local irritation and the resulting cough. The formula which I am in the habit of using is as follows:

℞ Acid carbolic, cryst . . . . . . grs. xxx,
Tr. opii et camph. . . . . ℥ iij.
M. Sig.: One teaspoonful in half a pint of hot water, to inhale as directed.

Another stage of chronic bronchitis is distinguished by a harsh, hard, irritative cough, and little or no expectoration. Such portions of the respiratory mucous membrane as can be brought within view present a pale, ænemic and dry shriveled appearance. Here we require, locally, a combination calculated to stimulate free capillary circulation and secretion, and also to exert the soothing anodyne influence necessary to control cough. For this purpose we have found the following combination to answer excellently well:

℞ Oil of Scotch pine . . . . ʒ j
Camph. tinct. of opium . . . . . . ℥ iij.
M. Sig.: One teaspoonful in half a pint of hot water, to inhale as before.

For the oil of Scotch pine almost any of the oleo-resin, balsamic preparations may be substituted.

Careful distinction must be made between the spasmodic dry cough arising from the local condition just described and the very similar group of symptoms arising as a result of reflex irritation communicated from some point outside of the respiratory organs, and consequently not amenable to any form of treatment directed to the respiratory tract. The source of irritation, whether in the stomach, the liver, the uterus or elsewhere, must be sought out and brought under control when the local pulmonary symptoms will be found to at once subside.

Any of the forms of bronchitis yield, ordinarily, with a reasonable degree of promptness, to general medication. Local treatment is a matter of choice, therefore, not a necessity, in these cases, except when from idiosyncracy on the part of the patient or some special weakness of the digestive organs, internal treatment is not well borne.

It is, however, in the different forms of pulmonary inflammation—pneumonia—inflammatory phthisis and pulmonary tuberculosis that, in my experience, the most gratifying and satisfactory results are obtainable from local treatment.

Pneumonic inflammation in a patient of ordinarily good constitutional recuperative power, if running a favorable course, should terminate in resolution and re-absorption of the inflammatory exudation; the structures involved resuming again their normal function. Frequently, however, on account of some constitutional vice or weakness, convalescence is retarded and the exudation, instead of undergoing re-absorption, takes on the so-called caseous degeneration, followed soon by suppurative action. This suppurative disease, if unchecked, tends gradually to spread and involve in its destructive action considerable portions of the lung structure; hectic fever, emaciation, and all the symptoms of a wasting, consumptive disease being developed in rapid succession. This chronic, suppurative pneumonia or inflammatory phthisis, recognized and treated sufficiently early, is, in a large majority of cases, amenable to treatment.

It is of primary importance in these cases, however, to avoid taxing the digestive organs with active medication. All of the assimilative powers of the system, reinforced by such agents as pepsine, pancreatine and the malt preparations, are required to sustain and to build up the nutrition, and the general vital energies of the system.

It is a well recognized fact that suppurative inflammations taking place elsewhere in the system are promptly limited and controlled by the local action of carbolic acid, and that the fever and general symptoms which may have resulted from such inflammation disappear on the subsidence of the local disease.

An inhalation of carbolic acid and camph. tincture of opium, as given in the previous formula, will here, as in chronic suppurative bronchitis, accomplish the purpose of arresting and limiting the suppurative action and at the same time will control the irritative cough and thus avoid the necessity of resorting to the ordinary opiate anodyne and expectorant mixtures for the control of the cough and local inflammation.

In the second or suppurative stage of true tuberculosis, a similar inhalation affords very decided and prompt relief to the active symptoms and will very frequently arrest, at least temporarily, the progress of the disease.

Inhalations as advised in these cases should usually be practised for from five to ten minutes at a time two or three times a day. The patient should be instructed to take full, deep inspirations and to expire slowly. When the patient is weak and easily tired, a few respirations through the inhaler may be followed by a period of rest. The exact temperature of the water is not material; what would ordinarily be termed hot water (about 150°) is preferable. The passage of the cooler air through the water will lower the temperature some, but not sufficiently to necessitate the application of heat during the practice of the inhalation.

Patients should be warned against exposure to the outside air for at least one hour after an inhalation.

65 East Randolph street, Chicago, Ill.

Observations, chiefly Clinical, on Anomalous and Obstinate Fevers.

BY F. GUNDRUM, M. D., OF IONIA, MICH.

The subject of fever, we must admit, is a very common one, both to the reader and practitioner, and we feel somewhat diffident in presenting so every-day an affair; but as a voyager could not always wish to ride through storms and rapids, and be able to enjoy it, so we hope the readers of this article may take a rest from the ovariotomies, amputations, extirpations of scapulas, spleens, kidneys, etc., etc., and wade through a few pages of more common and every-day practice. We think that the latter class of subjects have been too much neglected of late, and have been too much crowded out of medical journals, to give room for capital operations (reports). What interest is it to the ordinary practitioner, and especially to him of the country, to read minute reports of capital operations such as he can find described in standard text-books, or which he has read numberless times before in journals, except perhaps to learn the name of some one who has the skill (or "fool-hardiness") to perform such an operation? We do not wish to detract from the man who, with a brave heart and a skillful hand, snatches a life from the rapids which so surely and swiftly are carrying him into eternity. Such names are not to be forgotten, but let us also hear from men in the great army who fight death day and night, who quietly and unostentatiously do a good share of this fighting. The physician who carefully, judiciously and safely carries his patient through a course of fever of the more dangerous kinds should "rise and tell his experience" occasionally, and if he cannot add a large stone towards the erection of the clinical edifice, let it be a small one—it will help to build just the same.

The cases which are to be given below proved very interesting, and, to say the least, caused the writer much vexation of spirit. Although there are a great many points which will be commonplace, still we hope there will be a few points not uninteresting to the reader.

We shall not go into the theory of fever, argue the *pros* and *cons* of the bacteria, vibriones; speculate where the caloric centers are located, etc., but only wish to say that, although a great deal of light has been furnished to brighten up dark places, there is still much necessity for more light on a great many of the phenomena of fever. Some eminent writer has said there was much room and a great necessity for careful, patient and honest clinical observation. Hoping, then, that the above is ample apology for all that may follow, we shall proceed to report our cases, making such observations and comments as seem to us appropriate.

CASE I. Mr. K., native; age, 44. Has inherited a robust constitution, which has served him well in several severe attacks of illness. Was in our late unpleasantness; speculated in cotton, made much wealth. Lived on the richest food, and partook freely of stimulants. He was compelled to leave off this mode of living; he came north, purchased a farm, and, although his constitution, but more especially his digestive organs, are stamped with his fifteen years of "high" life, he has enjoyed tolerable good health since on his farm. This man is from ten to fifteen years older in tissue change than he should be had he lived more naturally. On August 16th we made our first visit. Patient has been feeling badly for two or three weeks—a feeling of "malaise," aching in the bones, much headache; has furred tongue, foul breath, anorexia, sluggish bowels and highly loaded urine. Thinks he has felt slightly chilly mornings, and some feverishness towards night. Our diagnosis was malarial infection. As I started to "fix up" some medicine for him, he said he would not take mercury, as he had been severely salivated many years ago, some three or four times. After some argument we concluded to try the vegetable calomel (Trousseau), aided by minor cholagogues. Succeeded in moving his bowels; then gave him 40 grains quiniæ sulph. in the following 24 hours, in five grain doses. The quinine was continued for forty-eight hours, when we had the patient thoroughly cinchonized, and it was suspended. His condition was not materially improved. He received small doses of the vegetable calomel, leptandrin and hydrast. can., with seidlitz mixture, until the effects of the quinia subsided. On the 25th, he was ordered five grains cinchonidia once in three hours, and this was continued for forty-eight hours. At the end of this time our patient was better. The chilly feelings in the morning had disappeared, tongue looked a trifle cleaner, bowels, when undisturbed, inclined to be costive; he partook of some food with more relish than for some time previously. His urine, still highly loaded, looked like old stock ale. For the last two or three days he has complained of a pain over right eye, following course of supra-orbital. It has gradually grown worse, and from two or three o'clock in the afternoon until towards next morning it is almost intolerable. Fowler's sol., ten drops three times a day, largely diluted, was ordered, and fluid extract aconite and chloroform, equal parts, as a local application. By September 2d our patient had so improved that he was able to be up a greater part of the time; he relished food very well; his tongue, though still furred, was improving in looks; but there was something in the looks of patient which led me to think that perhaps he was not on the road to perfect restoration. I cautioned him against leaving his room or borrowing any trouble; left him quinia, two grains; phosph. ac. dil., ten drops, and five drops of the English solution strychnia, to be taken three times a day, in water. Things went wrong on one of his farms; he got out of bed, dressed, walked over thirty acres of plowed ground twice, came home exhausted, became sick, and sent for me September 5th. He informed me that soon after being put to bed he had a severe chill, followed by fever. When I arrived he looked much exhausted; cheeks flushed; temperature 104 degrees, and pulse 120. Ordered liq. amm. acet., half oünce; acet. potass., 10 grains, and 3 drops tinct. aconite root, once in three hours, in water, and to have effervescing citrate magnesia till bowels move. In twenty-four hours, his temperature having dropped down to 99½ degrees, quinia was ordered once in four hours, six grains to a dose. He took nine doses, when his hearing became much affected, and the remedy was suspended. At 7 P. M., September 8th, temperature was 103 degrees, pulse 110; tongue much furred, breath foul and bowels confined. I now followed the instructions of Professor Moses Gunn, "to stop firing till the smoke cleared away, and see how much execution was done." On the 9th, temperature was 102 degrees, and by 7 P. M., 103 degrees. During this time he was well nourished, bathed in vinegar and water, equal parts, and took effervescing draughts. The patient grew worse; his strength decreased; tongue coated more—a thick yellowish or "dirty" white; his breath fouler, bowels still sluggish, urine thick, skin dry and husky; severe pain in the head and down spine; great dislike for all food, great thirst, restless and sleepless.

I had, for a few years previous to this, followed the advice of Trousseau in the administration of anti-periodics, he preferring the bark to any of its alkaloids, from which I have derived much satisfaction in some obstinate cases of malarial infection. He took a decoction made from one ounce of Squibb's quill (finely powdered) and two drachms aromatic powder daily for four days, with no abatement of his disease. He now swore he would take no more quinia or bark, and for a few days we relied on other remedies. The various febrifuges were tried, and, among others, the by Southern physicians highly lauded febrifuge, gelsemium. I gave this, alternated with eucalyptus (fluid extract), in their maximum doses; commenced with 10 drops of the former once in six hours, and half drachm of the latter at the same intervals. In two days gelsemium was increased to 30 drops and the eucalyptus to one drachm once in six hours. The gelsemium was carried to its full effect, double vision, inability to raise the eyelids, and profuse diuresis. What the eucalyptus did I never was able to see, but under both these remedies the temperature did not decrease in the least, but increased. On the sixth day we suspended the remedies, and tried Fowler's sol., with sulphite soda, half drachm of the former and two drachms of the latter, largely diluted, in 24 hours. Under these remedies the fever increased, and on the fourth day they were suspended (September 28th). At this time the temperature in the morning was never less than 103 degrees, ranging from that to 104 degrees, and in the evening 104 to 104¾ degrees, pulse ranging from 110 to 130. Patient was "losing ground" rapidly. I now commenced the administration of quinia in the heroic doses recommended by Liebermeister and Jurgensen; commenced on one scruple in two and a half ounces elixir tarax. compound. The first dose was given 7 P. M., October 1st; October 2d, temperature 104, when half a drachm quinia was given with quarter grain morphine; October 3d, 7 A. M., temperature 101, pulse 100—by 7 P. M. temperature had risen to 102½ degrees, and by 7 P. M. on the 4th, temperature 104¼, when half a drachm quinia and the morphine were again administered. This, with nourishment, and meeting minor indications, was followed for 10 days, when our patient began to improve, and after gaining strength for five days, and when the temperature evenings did not rise more than one and a half degrees, being normal in the morning, he was taken with hiccough. We now thought —— was to pay; the forces of the upper and lower regions were all against us, and I wished myself anywhere but attending this patient. But the physician's is a good deal like the marriage contract: "for better or for worse." I made no excuse, as we've seen it done where physicians did not want a patient to die on their hands, and either send him to a hospital or receive a telegram from afar-off bringing the intelligence that some relative was at the point of death; but stood up to the rack, and concluded that if death wanted that patient he'd have to get him fighting. One thing after another was tried—in fact, almost everything but musk, which we could get no where in the larger cities of the State. At first, patient did not hiccough when asleep, but he soon (on the fourth night) began it, which would wake him up.

We now commenced the hypodermic injection of morphia: Magendie's sol., and atropine (sol. containing one grain to the oz.; solutions were mixed equal parts). At 10 P. M. he received an injection, and this was repeated every hour, till sleep was produced. At first, fifteen drops were used at a time, and this was gradually increased until the desired effect was produced. The maximum dose reached was two grains morphia and an eighth grain atropine during the night. In this way we kept our patient asleep during most of the night (he was fed twice during the night), and during the day he was well nourished and toned up. On the ninth day the storm began to abate, and on the twelfth day we all had the satisfaction of seeing our patient free from his trouble, which had put his life in so much jeopardy. He improved slowly, and we all thought patient would have no more "pull backs," but on the eighth day, 7th of November, the temperature began to rise, pulse ditto, and in the course of four or five days the temperature averaged 102 to 103 degrees in the morning, and from one-half to one degree higher in the evening. His tongue, which had to some extent "cleaned off," and his breath grown sweeter, assumed their former characteristics. By the wife's consent, commenced the administration of calomel, six grains a day, in broken doses, and seidlitz powders sufficient to produce three or four motions a day, which was continued for two days, with the effect of producing the most horrid-looking and stinking alvine evacuations I ever met in practice. This treatment was continued for six days, when the evacuations became natural in odor, color and consistence. Our patient rapidly mended, and got well. When our patient began to have above described evacuations he said, "Doctor, when you get all that rotten stuff away from me I shall get well."

CASE II. Mrs. L., of P. Her history was related to me as follows: Mother was a delicate girl; married at 18; was delivered of patient in a year; never recovered her former health, and died within a year of a wasting disease, attended by a cough. The father is living, and a very healthy man. The latter says patient is the picture of her deceased mother. Patient has never enjoyed robust health; she developed into womanhood slowly, but since the menstrual function has been well established, has enjoyed tolerably good health. I found patient sitting in a rocking chair, looking pale and emaciated. She is in her twentieth year. Was married over a year ago, and soon became pregnant. About two weeks before her accouchement, she began to feel badly; had chills and fever; took to her bed, and had what the doctor (C.) called an attack of "bilious fever." She got some better before labor set in, but was not free from fever. She had not a very hard labor, and came up very slowly. Lochia continued till in the fourth week, stopped for ten days, when she had quite a sanguineous flow for nearly two weeks. She thinks there has been "an inward fever" all the time; she judges this by wanting to drink more than usual, and her urine being thick and high-colored. She made an effort every day at exercise, as the "old women" told her "she never would gain strength lying in bed." Her condition, Oct. 11th, was as follows: Loss of flesh, 20 pounds; very pale and sallow; respiration, 30; cough; pulse, 130; temperature (2 P. M.,) 103½ degrees; much thirst; bowels confined, anorexia; tongue, denuded of its epithelium, slick and very red; skin dry; urine high colored and scanty; headache most of the time; a severe pain in left side, over and above splenic region. Examination of lungs proved nearly negative, nothing but some bronchial engorgment; spleen and liver appeared normal; a very careful pelvic examination proved negative. She was ordered to her bed and to remain there, and to have bowels moved by enema and four drops tincture of aconite once in three hours. At 8 P. M., temperature, 104; at 9 o'clock she took two five-grain doses of quinia, twenty minutes apart. On the 25th, morning, temperature 103 degrees, and by 7 P. M. 104¼ degrees. She was bathed with cool water for an hour, thermometer falling two degrees, when she received fifteen grains of quinia, in two doses. On the 13th, temperature, 7 A. M., 102½ degrees; 7 P. M., 104 degrees; twenty grains of quinia, in three powders in an hour. On the 14th, 7 A. M., temperature, 100 degrees; pulse, 86; general condition about the same. 15th, temperature, 7 A. M., 100 degrees ; 7 P. M., 100½ degrees. 16th, 7 A. M., temperature, 99 degrees; 7 P. M., 99½ degrees; pulse, 80. She began to improve slightly, pulse running between 80 and 90, and temperature 99 to 100 degrees; tongue remained as described; urine more abundant and less loaded; sweats when she sleeps soundly. She was ordered quinia, two grains, 5 drops ar. sulph. ac., 5 drops tr. card. co., 20 drops, in syrup four times a day, with ten drops tr. of belladonna at bed time. Everything went well till the 19th. At 11 A. M. she was noticed to have fever; temperature 102½ degrees, which rose to 104½ degrees by 7 P. M. Sponging and quinia, with nutritious diet, in six days brought temperature to 99½ degrees; pulse, 80. The patient took nourishment well, and held her own. She drank one-half pint of port wine daily, from the 11th, but was now tired of it, and tried pale ale, of which she took a pint a day; temperature, oscillated between 99 and 100 degrees, till the 24th, when temperature, at 9 P. M., was 104¾. Quinia, sponging, etc., was again tried, with success, for in five days temperature was normal, A. M. and P. M. I now tried eucalyptus, drachm doses, three times a day, as a prophylactic, but in four days (29th), there was another exacerbation of fever. At 8, thermometer said 105 degrees. Quinia, with cold sponging controlled the fever, so that in four days temperature was A. M., 101 degrees; P. M., 102 to 102½ degrees. The pulse, however, remained up this time, not coming under 110 degrees. The tongue remained red and slick. She was now placed on Fowler's solution, to commence on 24 drops in 24 hours, and to be increased one drop daily, until 17 drops should be reached, then to decrease to 15 drops. Besides arsenic, preparations of iron, small doses of quinia, mineral acids, etc., were given as they were indicated. In this time of 18 days, the temperature fluctuated between 99 and 103 degrees; pulse not less than 110, and was what some call an irritable, angry or mad pulse. Occasionally she had a profuse night sweat, but even then her temperature was not normal. I now tried an infusion of digitalis as recommended in Bernheimn's *Clinique Medicale*, dividing two drachms into three powders, one of which she received each twenty-four hours.

Besides this she took two grains of gray powder three times a day, and nourishment. On the morning of the third day pulse fell to 56 and temperature to 97 degrees, and tongue was loosing its redness; digitalis was diminished by half, and pulse kept between 60 and 70; in two weeks, remedy was suspended; pulse never raised above 70 after.

Before leaving the house, November 29, her stepmother said: "Doctor, Liz is getting tired of her sick diet, what shall we give her?" I answered: "Oh, most anything." In two days my patient smarted for the careless answer. The old lady gave her some cold slaw and cheese at noon, and an apple dumpling at 5 p. m., and at 6 we received a telegram to come and see patient. A gentle emetic and seidlitz power unloaded the alimentary canal, and the patient went nicely again. This patient in the course of six months was able to do light housework, and now is healthy and does all her work.

Sarah F., age 13½. Her mother died of phthisis pulmonalis when Sarah was four years old. She is a blonde, of a nervous temperament and small for her age. Has been attending school until within two weeks, when she felt no longer able. The house where she has been living for ten months is situated within two rods of the D., L. & N. depot privy, on the west, which has no outlet or sewerage, and within two to three rods from a hog pen and livery stable on the east. For the last week the patient has lain down on the couch part of each day. Has had very little if any appetite; has grown thin and pale. Saw her first December 24, 1877. Her condition was about as follows: A wornout look; pale, except left cheek, on which she had been lying, which has a red blush upon it; has headache; loathing of food; skin hot and dry; breath fetid; bowels confined. The tongue is covered with yellowish white fur, red on tip and border; on tip, papilla are very prominent and very red and angry looking. She feels chilly mornings, and has fever in afternoon and evening, often lasting till latter part of night. Pulse (2 P. M.) 120, temperature 103 degrees. To have eight grains of gray powder in the course of six hours, to be followed by sol. cit. magnesia till bowels move, and to have two drops tr. ac. root once in two hours, and to be sponged once in three hours in warm "soda water." Early on the 25th she commenced taking cinchonidia, two grains once in two hours, and to continue until one scruple was taken. From above and subsequent similar treatment patient was much improved. Tongue cleaned and temperature nearly normal, marking one-half to one degrees higher in the evening than normal. Atkins' tonic was prescribed and I ceased my visits, but on January 5 was again called. She had begun to sit up, but for last two days had to remain in bed constantly, and her fever returned two days before. Her temperature at 7 P. M. on the 5th was 104°, pulse 134; tongue had become again coated. To have seven grains quinia between 8 and 9 P. M, and during the night to have a teaspoonful of the following mixture: Liq. amm. ac., 3 ounces; acet. potass., 2 drachms; tinct. aconite, 1 drachm; once in two hours. On the 6th, 7 A. M., temperature 101½ degrees; 7:30 P. M., 103½. To have eight grains quinia at 9 P. M. and continue diaphoretic mixture. 7th, temperature (7 A. M.), 100½ degrees; 8 P. M., 102 degrees; pulse, 100. On the 8th, at 7 P. M., temperature, 103¾ degrees. Received 10 grains quinia at 8:30. 9th, 7 A. M., temperature, 98 degrees; 7 P. M., 99 degrees. Two grain doses quinia were ordered three times a day, in solution, and with nutritious diet we soon saw our patient mending, and I left her again. But on the 15th we were again called. Nurse had noticed for two or three days that patient did not do well and seemed to be losing her strength, and that her cheeks flushed up towards night. Temperature (11 A. M.), 103½, which by 7 P. M. reached 104½. Was aware of the pernicious influence the surroundings must have on the patient, but thought there was a peculiar sickly odor in the house which the surroundings could not account for, and after a diligent search we found, in a dark corner in the cellar, a "souvenir" of the former occupants—cabbage, turnips and a few onions, in a semi-fluid state. This was cleared out, and it was hoped to have some influence for the better on the air our patient breathed. By the use of quinia and cold bathing we reduced the temperature to normal in eight days, and, as we supposed, patient again on the road to convalescence. But this was a delusion. In five days she commenced to cough; her fever returned in full force; her tongue was not much coated and looked rather healthy; bowels confined, somewhat flatulent and slightly tender; no pain in right iliac region. The patient was very much emaciated. On the 28th (7 P. M.), temperature stood 104⅔; pulse, 138; the latter was small and thready. Patient was sponged till temperature stood 102, when she received 12 grains quinia. 29th (7 A. M.), temperature, 103 degrees; 7 P. M., 104 degrees. Quinia again ordered. 30th, A. M., temperature, 102½; P. M., 103¾. November 1, temperature, 6 P. M., 104 degrees; pulse, 140. Ordered quinia, but was vomited up; tried per rectum, but not retained. Food and stimulants were given as much as patient could stand. She relished and partook considerably of a strong decoction of coffee and cream, equal parts. I now ordered digitalis in decoction, ten grains to four ounces water, and she took a tablespoonful once in three hours. On last half of third day pulse fell to irregular and very small; temperature fell to 100. Half the quantity was continued for two days, but pulse continued to fall, and the remedy was suspended, and food and stimulants relied on. Temperature on the 5th, 7 A. M., 97½; 7 P. M., 99. The temperature gradually increased and on the 9th was, 7 A. M., 103; 7 P. M., 104¼. The digitalis was again administered, with like results as before, with the exception that when the pulse fell to 56, temperature 97, patient vomited and her vision became blurred. The digitalis was discontinued for two days, and re-administered, tablespoonful, three times a day. The pulse rose to 64 and remained there, and the temperature fluctuated between 100 and 102 degrees. The patient had emaciated to the last degree; the pulse scarcely perceptible, lips and tongue very pale, tongue very small and healthy, almost clean. The cough had disappeared under appropriate treatment, and the tenderness and flatulency had disappeared. Frequent careful examinations failed to discover any organic lesions. She was now put on four drops of tr. iron and one of Fowler's solution once in four hours, an emulsion of cod oil (cod oil, yolk of eggs, sherry wine, phosphoric acid and bitter almond water), a teaspoonful once in six hours. The most careful attention was paid to her diet. I now insisted on moving the patient, to which the father agreed. We had read an article in the *London Lancet* on hyper-ventilation, and I now proposed to perform that "experiment." (See *Lancet*, reprint, December number, 1877, p. 529.) The patient was placed in bed, warmly covered with blankets, and a woolen hood over the head and around neck, and the windows, the upper sash of each, let down. The atmospheric temperature averaged from eight to twenty above zero. The treatment until she was discharged cured was the emulsion of oil, and the arsenic and iron were gradually increased, until fifteen drops of tr. iron and four drops Fowler's solution were given daily. She also took small doses Huxham's tincture, and occasionally the digestion had to be regulated or stimulated a little. Temp. never rose above 102° after removal.

What was the pathogenetic influence in these cases? In all frequent and very careful examinations failed to discover any organic or local trouble as the disturbing element. They were, all three of them, idiopathic fevers; what kind were they? There were no distinctive features of typhoid fever. The temp. chart, absence of eruption, and absence of all abdominal trouble (exception, little girl of which more below,) were absent and typhoid fever must be excluded. Case first, in the first part of his sickness, was just such a case as all practitioners in malarious districts often meet with and could be ascribed to nothing but malarial infection; but was it the mere exposure that brought him down again? We say not. We never have got over believing that had we commenced treatment as we ended our patient would have been saved a long and painful illness. Now, we never were much of a liver doctor, but this case gave clear, conclusive evidence that the liver functionation either was bad from the beginning or became so. We do not wish to say that the disturbed hepatic function was the sole cause of the prolonged pyrexia, but the evidence is clear as day, as soon as we obtained those unhealthy bilious stools and the motions became natural in odor and consistence, our patient got well. It may be argued what share the previous treatment (anti-malarial) had in bringing about an unhealthy condition of the liver, or whether the liver was out of order until then, or whether we shall attribute all the good results to the calomel. Be this as it may, for ourselves we shall always believe the latter remedy is the agent that should receive the praise. Why was it that all the principal remedies, although given in maximum doses, utterly failed to counteract the malarial influence? The question, we believe, is not yet settled whether these anti-malarial remedies, so called, utterly destroy the toxic agent, or protect the nervous system so that no harm may be done, or stimulate the choked, depurating up organs and have the morbid agent expelled from the system. And here I wish to say a few words in regard to calomel. Although, as has the Christian religion, a great deal of harm has been done with it in the hands of asses, shysters and designing quacks, its efficacy is indisputable in the hands of the judicious practitioner, especially in malarious districts. In the first part of my practice, 1868 to 1871, the profession was raising its voice against calomel, and the Edinburg committee of five experimented on dogs, rabbits, etc., for two years, and said that a dog cut open and a biliary fistula established, secreted less bile under the influence of calomel than when not taking it. This led many to throw it out of the list of remedies, ourself among the number, but we were glad to return to it again, as was J. Milner Fothergill to his dose of Dovers and calomel. Healthy dogs with biliary fistulas in Edinburg, a non-malarious district, are not sick patients in a grand river Wabash, Ohio, Miami or Mississippi valley.

Case II. If it was not malarial, I do not know what it was. It may have been typhoid in the first place, and the repeated exacerbations a fièvre de retour or fever of convalescence (Bernheimn). In this, as in case first, there was no local trouble that we could ever detect, to keep up the high temperature and the many relapses.

Sarah F. was indeed a puzzling case in many respects. I have not the least doubt but what this girl's sickness was produced by the surroundings. To eat and sleep between a large privy and hog pen and horse barn, and over a pile of decomposing vegetation, is excuse enough for any disease. This girl started to convalesce several times, but relapsed every time. Was it any thing else than the constant inhalation of rotten effluvia?

The remarkable feature in all these cases was, that the condition of the mucous membrane of the mouth and tongue did not indicate that profound blood change and adynamic condition often seen in especially grave typhoid fever, indicated by a brown, dry, cracked tongue, inclined to bleed on the slighest provocation, sordes on the teeth and lips, inability to protrude tongue, low, muttering delirium, slipping down in bed, etc.

The third case was emaciated as much as any one we ever saw, either in typhoid fever or consumption, and we never expected to see her get well. Emaciation or marasmus had gone so far that it expected the patient could not digest and assimilate enough to rebuild the waste. I shall take the liberty to translate two cases from Bernheimn's *Clinique Medicale*, page

322, with a few of the distinguished clinician's remarks on what he styles fièvre de retour or of convalescence.

CASE VIII. Celestine Liegey, age 22 years, nurse, entered St. Charles hospital (Nancy) September 20th, 1875, on the fourth day of a continued fever of moderate intensity, complicated with anæmia and a frequent pulse. The temperature reduced by digitalis remounted, but not to so high a degree. Defervescence began on the 12th, and was completed on the 19th. Since the 15th day of the disease, already the tongue is moist, stools molded, the belly supple and painless. She got up on 20th day, and could even walk out into the court yard on the 22d day. The temperature remained for seven days 36 degrees in the morning, and 38 degrees in the evening; then, on the 25th day, it raised briskly from the morning to the evening, from 36.4 degrees to 39 degrees; the next day, evening, it is 40 degrees, and it continued elevated four successive days—37.5 to 38 degrees mornings, and about 40 degrees evenings. The patient is still up on the 26th day; she lost her appetite on the 27th. There is constipation, bowels painless, without spots; respiration clear; carotid soufle strong. The patient received on the 23d day, in the evening, one gramme sulph. quinia (15 grains); next morning temperature was 37 degrees, in the evening it has remounted to 40 degrees. On the 34th day, evening, a new administration of quinia of 1.50; the next morning, temperature was 37 degrees, in the evening it remounted to 40 degrees. On the 37th day, the patient began to take digitalis, 0.75 (nearly 12 grains), per day, which was continued for three days. Defervescence was produced. The temperature descended to 36 degrees on the 40th day. It again gradually arose, step by step, oscillating between 38 degrees in the morning, and 39.5 degrees in the evening, until the 45th day; then, for some days following, between 37 degrees morning, and 39 degrees evening. We can establish no other symptoms than inappetency, anorexia, a certain moral dejection, which can also be associated with chlorosis. We gave her tea, with 40 grammes of rum per day, and 100 grammes wine of cinchonia. She was compelled to take four pints of milk a day. In the first days of November—45th day—she found herself better; her appetite came back to her; got up some during the day; she continued to eat and do well, although temperature oscillated between 38 and 39 degrees.

On the 54th day, in the morning, the patient received anew 1 gramme sulph. quinia. The evening exacerbation was reduced to 37 degrees. It now seemed as if the temperature would regulate itself to the nominal standard. Illusion! The latter part of the 64th, the exacerbation returned anew, going up to 39, 39.5, and even 40 degrees; the temperature remaining nearly normal in the morning. Notwithstanding the exacerbations, the patient continued to do pretty well, and nourished herself sufficiently. She quitted the hospital on the 27th of November. We sent her into the (her) country, thinking that the hospital influence and a certain longing for home were perhaps not strangers to the influence of the obstinate persistence of these febrile attacks.

Case XIV.—Marguerite Midot, aged 54, entered the hospital under our service February 1, 1875. On the fifteenth day of a typhoid fever of moderate intensity, digitalis abated the fever, which continued at a lower temperature than it was before, between 38 and 39 degrees. On the 25th day the symptoms of the disease had disappeared; tongue moist, stools moulded, belly painless, and has appetite. The temperature continued 37.8 in the morning and 38.8 to 39 in the evening. To reduce this temperature, which had survived all the other symptoms, the patient received, on the 32d day, 12 grs. quinia sulph. without effect. On the 36th day she received 20 grs. of quinia sulph., which abated the temperature by next morning to 36.2 degrees. It raised, however, by evening to 37.3, and remained during five days, until the 43d day of the disease, 37 to 37.4 mornings, and 38.5 evenings. A repetition of the quinia given on the 43d day reduced the temperature to 36.4, but it raised again, and the next day evening—on the 45th day—to 39.7. The patient received during three days, 1 gramme digitalis—46th, 47th and 48th day. The temperature began to fall progressively. It commenced to fall on the morning of the 47th day, and on the evening of the 49th day temperature fell to 37 without the pulse being in the least affected. During six days temperature was normal night and morning; then on the 66th day it re-mounted step by step, and reached on the 69th day in the evening 40.4. Then it re-descended, but continued to oscillate between 37 to 37.5 in the morning to 38 to 39 in the evening. It appeared to regulate itself towards the normal standard by the 82nd day, when the patient, already convalescent two months since, quit the hospital.

"*Therefore, on the 25th day, our patient was convalescent; the fever survived, and only ceded momentarily to quinia; was abated by digitalis; remained 16 days normal; then remounted, and remained elevated anew until the 82nd day.*"

These two cases we have translated as showing similarity to two of our cases. The first case, quoted from Bernheimn, he calls continued fever, though it may have been typhoid, and the second typhoid, Bernheimn says, although the patient may have actually gone into the convalescent state in every respect, and remained there for a great number of days, still a fever may return, which may continue for a long time without being due to any palpable or assignable cause, such as eschars furuncles, or the result of early alimentation, *febris carni*, or from exercise from the first efforts at getting up—in fact, any cause which can come within the reach of our senses. Such may be their duration, if not arrested, that they may produce marasmus, cachexia and hydremia analagous to paludal cachexia. Will say a few words as to the value of a few of the reliable remedies. Gelsemium is of very little value in fevers that mark a high temperature, and in the mild fevers it is not needed. We have tried it more than fifty times in malarial fevers, and never received any benefit. Eucalyptus I cannot praise, as some have, in the treatment of malarial fevers. I have not received the beneficial influences claimed for it by some. In chronic malarial infection, where quinia does not fit the patient, or has been given until the system has become indifferent to its influences, it has proved beneficial in my hands, *i. e.*, I think so. Quinia, digitalis and coolish or cold sponging, or the moderate bath, are the best means, so far as my experience goes, to subdue hyperpyrexia. Nutrition and assimilation must receive especial attention, and the fats must not be lost sight of.

(To be continued in the July number.)

Report of Ten Cases of Ovarian Disease, with Operation for Removal.

BY DR. C. SHEPARD, OF GRAND RAPIDS, MICH.

Read before the Medical Society of Western Michigan, August, 1878.

In contributing something that may tend to keep up an interest in our newly organized society, and be of some practical use to its members, I will give a short history of several cases of ovarian disease that have come under my personal observation and treatment within the last eight years. I shall only mention some of the prominent features and circumstances connected with each case, and upon these make such comments as I consider of some practical utility.

Case I. Mrs. W., of Olympia, Washington Territory, aged 40, came under my observation in April, 1870, presenting an abdomen greatly enlarged. She dates the commencement of the enlargement about one year previous to the time when I first saw her; but from that time on she enlarged rapidly, and her health became impaired. Had difficulty in breathing, inability to lie down, emaciation, etc., together with a tumor, presenting external to the vulva, as large as my fist, the surface of which was excoriated and sore, giving her much discomfort when erect and walking.

She could press the tumor back when in the recumbent posture. The enlarged abdomen gave a distinct sense of fluctuation in all parts, but most distinct above the umbilicus; there was a slight tympanitic sound in this region when lying upon the back. Palpation and the hypodermic syringe made manifest a large ovarian cystoma, floating in a large quantity of ascitic fluid. The tumor protruding external to the vulva proved to be connected with the peritoneal cavity, and was an elongation of Douglas's *cul-de-sac*, and filled with ascitic fluid. Diagnosis—ovarian cystoma with ascites.

An operation for removal was advised, which was made May 31st, 1870, by a short incision in the mesial line. The tumor proved to be a polycystic cystoma, composed of one large cyst filled with secondary and tertiary formations by endogenous growth. An opening was made in the outer cyst ample enough to admit my hand, the smaller cysts broken, and the *mass* in that way reduced so that it was withdrawn through an incision four and one-half inches in length. The pedicle was short and thick. It was ligated with a double silver wire, drawn tight and twisted on each side, and around all, to make it the more secure, a single ligature of silk was cast and cut short. The tumor separated and the pedicle dropped into cavity of pelvis. Closed the external wound with quilled sutures. Patient did well; nothing of importance occurred to retard recovery save some diarrhœa and tympanitis, which proved troublesome for a few days. She left her bed in three weeks from date of operation. Has remained well from that time to this, and is now in her western home. The patient had a great amount of resolution and a full determination to recover. This, I think, had much to do with the favorable result in this case. A patient who is despondent, and asserts to a premonition that "she would surely die," would be, to my mind, one of the points which would militate against an operation. The protrusion of a portion of the peritoneal sack external to the vulva is one of the annoying complications in ovarian diseases of not frequent occurrence. This protrusion was between the rectum and uterus, and, as a matter of course, the vaginal mucous membrane was its outer covering. This is an illustration of the yielding nature of the tissues which enter into the structure of the reproductive system.

CASE II. Mrs. S., of Berlin, Ottawa county, Mich., aged 25, came under my observation in May, 1871, presenting an abdomen very much enlarged, resembling case number one in many of its features, and occupied about the same length of time in its growth or enlargement. Palpation revealed a large tumor floating in ascitic fluid, and the diagnosis made accordingly—ovarian cyst with ascites.

A removal of the tumor was advised, as the only sure means of relief. Performed the operation June 12th, 1871. This tumor was a large multilocular cyst, composed of one large cyst and a few smaller ones. Termed an oligocyst, in contradistinction to case number one, which was a polycystic cystoma.

A short incision was made in the walls of the abdomen, the large cyst tapped, and its contents removed. The whole was then drawn through the opening. The pedicle was short and broad. A double ligature was passed through its center, and each side tied separately. The tumor was separated, ligatures cut short, and the pedicle dropped back into the cavity of the pelvis. External wound was closed with quilled sutures. This patient did well, and is still living. The ascites in this and the first case was no doubt brought on by the pressure of the ovarian growths, as they had no return of the dropsy since their removal; no other cause could be assigned for it.

Case III. Miss B., of Hastings, Barry county, Mich., aged 19, came under my observation in Oct., 1871. Her abdomen was enlarged, presenting the appearance of that of a woman at full term of pregnancy. She was a school teacher. About one year previous to my seeing her, she observed an enlargement in the left iliac region, which continued to grow slowly for three or four months, and then more rapidly, attended with pain and impairment of general health. She was obliged to abandon her school, and the family physician was called to see her, who diagnosed her case as one of pregnancy. To determine that, a novel plan was adopted (as I was informed by the parents), to wit: pouring cold water upon the naked abdomen, for the purpose of exciting movements of the child in utero, which were declared by the physician to be felt, against the urgent protest of the patient that she could not possibly be pregnant. Nine months and more had expired, and no signs of labor appearing, another physician was called, who at once decided that she was not pregnant, but that the enlargement was an ovarian cyst. I was called at this time, and a careful examination went to confirm the doctor's opinion. Removal of the tumor was advised, as the only sure means of relief. The patient assented, and was anxious to have it done at once, that she might get relief from her sufferings and remove the stain that had been cast upon her character by a wrong diagnosis. The operation was made November 13th, 1871. An incision was made in the linea alba from an inch and a-half above the pubes to within an inch of the umbilicus. This tumor, on careful examination, proved to be compound in character—in other words, part solid and part fluid, the larger part being solid. There were several cysts, holding nearly a pint each, which, on being opened for the purpose of reducing the tumor, that it might be removed through the abdominal incision, were found to be filled, some with serum looking fluid, one with pure pus, one with bloody fluid, etc., all of which bled freely on being opened. At this stage of the operation things looked quite formidable, from loss of blood and bad action of anæsthetic, producing vomiting, etc. The tumor was soon reduced in size so as to be removed from abdominal cavity, and the pedicle, which was filled with large blood vessels, was immediately ligated with double ligatures and tied each side. The tumor was severed, ligatures cut short, the cavity of abdomen well cleansed, the pedicle dropped into pelvis, and abdominal incision closed with quilled sutures. This case resulted unfavorably. The nausea and vomiting continued for several days. She finally died from exhaustion, and perhaps blood-poisoning, on the eighth day after the operation. This case illustrates how necessary it is to make our diagnosis accurate. No one knows how much mental suffering this poor girl endured through the mistake made in her case. With the ample instrumental means we have at hand to assist our senses of sight, hearing and touch in making a differential diagnosis in these cases, it would seem that no physician should be excused for making so grave a blunder as in this case. Had I been aware of the large vascularity of this tumor, and the nature of the contents of the cysts, I should have made a long incision in the walls of the abdomen, or sufficient, at least, to have removed the tumor entire; thus avoiding the loss of blood, and the almost unavoidable accident of getting the poisonous contents of the cysts into the cavity of the abdomen, as occurred in this case, and I fear had something to do with the unfavorable result. I believe the long incision, with its liability to secondary bleeding from its cut surface, and suppurate inflammation in its tract, to be less dangerous than to attempt the removal of a tumor of this kind through a small or short incision. Therefore I would advise the long incision in all .cases of doubtful composition, especially when the larger part of the growth was solid and vascular. In conclusion, I would say, that there were many indications in this case that the tumor might be malignant, such as its fibro-cystic structure, its rapid and painful growth, the peculiar contents of the cysts, and the rapid impairment of her general health.

CASE IV.—Miss P., of Lamont, Ottawa county, Michigan, aged 25, came under my observation in November, 1871, presenting an abdomen enlarged to the size of a person at full term of pregnancy. It was of about two years' growth. Dr. Z. E. Bliss had seen the case, and diagnosed an ovarian cyst. The patient was anxious to have it removed, and I was called upon to make the operation, which was done on the 17th of November, 1871. It was an unilocular cyst, and removed through a short incision in the mesial line. Pedicle secured by double ligature, the tumor separated, the ligature cut short, the pedicle dropped into pelvic cavity, and external wound closed by quilled sutures. This patient rallied from the operation, and apparently did well for about twelve hours (save the nausea and vomiting which was kept up from the effect of the chloroform), when she began to show signs of internal bleeding, which increased in gravity until she died, in about thirty-six hours after the operation, from exhaustion and nervous shock. I have no doubt that, in the effort at vomiting, one of the ligatures slipped from the pedicle, which was the cause of her death. This was a plain case of unilocular ovarian cystoma, uncomplicated, and in a young person, with her system in good condition for an operation, she ought to have got well. I think the physician who makes the operation should insist upon having the patient under his immediate observation and care during after treatment, whenever it is *possible* to do so, that he may meet all emergencies like this as they arise, by opening the cavity and securing the bleeding vessels at first signs of hemorrhage. In this case the patient was left in charge of another physician, fifteen miles from Grand Rapids.

CASE V.—Mrs. Z., of the town of Byron, aged 30, came under my observation in January, 1872. Her abdomen was very much enlarged, the commencement of which she dated back about one year. She had been treated for abdominal dropsy, but received no relief. Her general health failing, I was called to see her. Upon careful examination I found a large ovarian cystoma, floating in a large quantity of ascitic fluid; diagnosis accordingly.

This patient generally had considerable tenderness over the abdomen, an inability to be in recumbent posture, and difficulty in breathing. Believing the ovarian growth to be the foundation and cause of all her troubles, I advised its removal, which was done January 22d, 1872. This tumor was removed through an incision in the walls of the abdomen about five inches in length. It proved to be a *polycystic cystoma* of endogenous growth. The tumor was reduced in the same manner as in the first case and the sack drawn out. The pedicle, which was short and broad, was tied with double silk ligatures, the tumor separated, ligatures cut short, the pedicle dropped into cavity of pelvis, and external wound closed with quilled sutures. This patient did not do well.

The peritoneum covering the intestines, and lining the walls of the abdomen at the time of the operation, was discovered to be highly injected and sub-acutely inflamed. Active inflammation set in, with rapid pulse, high temperature, delirium, tympanitis, and death in about seventy-two hours from time of operation. There were no prominent symptoms before operation indicating the sub-acute peritoneal inflammation going on in this case. All of her prominent symptoms could be, or were, accounted for from the presence of the ovarian and the ascitic accumulation. The reduction of the inflammation before the operation was made would have improved her chances for recovery.

CASE VI.—Mrs. W., aged 57, came under my observation in July, 1875, with her abdomen greatly enlarged. This, upon careful examination, was found to be produced by a large ovarian cystoma, complicated with ascites. The ovarian growth was discovered about two and a half years previous, and now, together with the accumulation of ascitic fluid, was crowding upon her vital organs, impairing her general health and giving rise to much suffering. Its removal was advised, which was at once decided upon, and the operation made July —, 1875. Removed the tumor through a short incision in the walls of the abdomen. It proved to be a polycystic cystoma, and its surface, as well as the peritoneum covering the intestines and lining the walls of the abdomen, was found to be studded, or covered generally with small tubercular elevations, varying from the size of a pin's head to that of a kernel of wheat, and some even larger. These all had a bright-red appearance, as did also the peritoneum. This was at once decided to be a fatal complication. The pedicle was ligated with a double silk ligature, tied upon each side. The tumor was then separated, the ligatures cut short, pedicle dropped into cavity of pelvis, and the external wound closed with quilled sutures. The patient seemingly did well for three or four days, when signs of subacute inflammation set in, the bowels became tympanitic, followed by septic poisoning. The patient died on the eighth day after the operation.

This case and the one just preceding it resemble one another in their peritoneal complications, and, I think, were necessarily fatal under any kind of management. The diffuse tubercular deposits found in this case are described by some authors as diffuse cancerous disease of the peritoneum. As no post-mortem was had, I do not know whether other organs were diseased or not. Her complexion indicated the cancerous cachexy.

Case VII. Miss E., of Plainfield, Kent county, aged twenty-seven, came under my observation in April, 1877, presenting an abdomen very much enlarged, and giving a distinct sense of fluctuation in all parts. The abdomen was more prominent and full upon the left side than the right. The enlargement was first noticed about one year previous to my seeing her, and as it was now encroaching upon the vital organs and impairing her general health, relief was sought. A careful examination revealed a multilocular ovarian cyst, and its removal advised. The operation was made July 19, 1877. An incision three inches in length was made in the linea alba, two inches above the pubes, the tumor exposed, its contents evacuated, the sack drawn out of the abdomen, the pedicle ligated with strong silk ligature, which was previously carbolized, and the pedicle tied in two sections. The tumor was then separated, and pedicle dropped into the cavity of pelvis. The ends of the ligature were brought out at the lower angle of the abdominal wound, the incision in the walls of the abdomen closed with interrupted sutures of fine silk thread, carbolized. The abdomen was covered with a mass of fine cotton batting and secured by a flannel bandage. This patient did well, having had no unfavorable symptoms. Pulse and temperature but slightly above normal during convalescence. The bowels were left to act spontaneously, which they did on the twelfth day after the operation. The ligatures separated from the pedicle in about twelve weeks, and were removed. Patient now well. This case, you will observe, was a plain, simple, uncomplicated one of ovarian cystoma, in a young person; and it is my belief that all such cases, under the present mode of operating and improved methods of after treatment, should get well.

Case VIII. Mrs. M., of Alpine, Kent county, Mich., aged 57, came under my observation about August 21, 1877, with her abdomen greatly enlarged, from what, upon careful examination, was diagnosed as multilocular ovarian cystoma. She was suffering from its encroachment upon her vital organs, and her general health was becoming seriously impaired. An operation for its removal was advised, but the patient decided not to have it done at that time. She desired to have it tapped and its contents drawn off, which was done, and forty-eight pounds of dark, highly albuminous fluid evacuated by the use of an aspirator. This cyst refilled again in four weeks, at the end of which time the patient was very anxious to have the tumor removed, which was done September 21st, 1877. From the time the tumor was aspirated until it was removed, the patient had lost much in flesh and strength, and on the morning of the day fixed for the operation she was found bolstered up in bed, unable to lie down, breathing hurried and labored, her face flushed and somewhat livid, pulse 130 per minute and feeble. She had much soreness generally over the abdomen, especially in right side. Much doubt was expressed by all the physicians who were in attendance (for counsel and assistance) as to the propriety of making the operation, fearing that she might die on the operating table. But the question was decided by the patient herself, who sent the following words in to the council-room: "Tell those doctors to come in and take this tumor out at once." Her command was obeyed. A short incision was made in the walls of the abdomen, the largest cyst tapped, and contents removed. Much trouble was experienced in detaching the adhesions, which were extensive and strong, to the walls of the abdomen and omentum. The adhesions to the omentum were left, a ligature passed around it, which was then severed, the ligature cut short, and the stump dropped into the cavity of the abdomen. The adhesions to the peritoneum were detached by my fingers, and the cysts drawn from the cavity of the abdomen. At this stage in the operation the patient went into a state of collapse. She stopped breathing, her heart ceased beating, her chin dropped, the face became exsanguinated, and we all said she was dead. Some one proposed to elevate the foot of the table, which was no sooner said than done, and the body placed nearly in the perpendicular position, with head down. The blood commenced flowing more freely to the brain from its gravity. Her face soon assumed its natural color, her heart commenced beating, breathing was restored, and life again took its wonted channels. The operation was completed by ligating the pedicle with a double silk ligature, passed through its middle and tied each side, the pedicle severed and dropped back into cavity of pelvis. The ligatures were brought out at lower angle of incision, and the opening closed with uninterrupted sutures of fine silk thread. A roll of fine cotton batting was then placed over the abdomen, and over all a flannel bandage. The patient was put in bed, wrapped up in warm flannels, an opiate given, and the patient left feeling comfortable, with a pulse below 100. This patient did well, as nothing occurred to retard her recovery save some bed sores. Her bowels were allowed to act spontaneously, which they did on the thirteenth day after the operation. The ligatures came away in about fourteen weeks. The points worthy of notice in this case are—first, that this lady was in a better condition for the operation when I first saw her than afterwards. Second, the tapping should not have been done; the drawing off of forty-eight pounds of highly albuminous fluid, and the rapid refilling of the cyst with same in four weeks (the cyst and contents at time of removal weighing over fifty pounds), made a large draft on her vital forces, and reduced her to the condition she was found in on the day of operation. I would make it a general rule never to tap an ovarian cyst, unless absolutely necessary to make a diagnosis clear, or to give temporary relief in complicated cases not admitting of an operation for removal. Third, the collapse which occurred in this case was caused in part by the anæsthetic used, and partly by the sudden change of position of her vital organs, and shock from rapid emptying of the cystoma. To avoid this I believe pressure upon the diaphragm should be made, thereby preventing sudden change of position. Fourth, The means resorted to for restoration of the vital action in this case would be found valuable in cases of collapse from any cause—that is, elevating the body with the head down. It is said that there cannot be any great harm done without some good resulting, which I believe proved true in this case. The sudden collapse and arrest of circulation so closed the torn vessels of the peritoneum as to prevent after bleeding and oozings from torn surfaces, thereby lessening the chances for septic poisoning. I also believe another means might be brought into requisition for restraining bleeding from torn and cut vessels in the abdominal and pelvic cavities, to wit: pressure for a short time upon the abdominal aorta, just below the diaphragm, sufficient to arrest the circulation in the injured vessels, and thereby close them.

Case IX. Mrs. B., of Pierson, Montcalm county, Mich.; 33 years of age. She commenced menstruating in her fourteenth year, and continued menstruating regularly (save when pregnant and nursing) up to January 19th, 1878. When between seventeen and eighteen years of age, she noticed a small tumor in the left iliac region, which continued to grow until it was removed—about four and one-half years from the time she first noticed it. The tumor was diagnosed as ovarian, part fluid, part solid. The fluid part was drawn off at eight different times; the amount taken away at the last tapping was twenty pounds. Soon after this the solid portion was removed by abdominal section, which weighed forty-eight pounds. The incision in the walls of the abdomen was made about one inch to the left of the linea alba, and was about nine inches in length. She says the surgeon had to cut the tumor in four parts to get it away. She thinks the pedicle was brought outside and secured, and a cautery used, as she has a large cicatricial scar on the walls of the abdomen. She made a good recovery, and in three years after married, and has given birth to two children. In March, 1877, she discovered another tumor in her right iliac region, which continued to grow slowly up to about the 3d of September, 1877, when it took an increased activity, and doubled in size in a short time. This tumor had been diagnosed as a fibroma, pregnancy, etc. About the 15th of December, 1877, she was taken with severe pains in her abdomen, in character something like labor pains. I was sent for on the 19th for the purpose of determining the character of her difficulty. I diagnosed it a multilocular ovarian cyst, and advised its removal. I performed the operation January 23d, 1878. There were no adhesions. The pedicle was secured by double ligatures, which were brought out at lower angle of wound; the section of walls was closed by fine silk sutures, the abdomen covered with cotton batting, and secured by flannel bandage. On the 25th, she had a free discharge of blood from the vagina, which continued slightly until the 27th, when it ceased. I saw her on the 29th, and found her doing well. This patient recovered and is now well, as I learn from Dr. Griswold, of Sand Lake, who took charge of the patient after the operation.

CASE X. Mrs. B., of Conger, Montcalm county, Mich., 33 years of age, mother of four children, the youngest five years old. Has not been pregnant since. Has continued to menstruate regularly for the last four years, and considered herself well until about September, 1876, when she noticed a small tumor in the left iliac region. This continued to grow slowly up to April 9, 1878, when it was removed by abdominal section. The sack and contents weighed about thirteen pounds. The tumor extended from below the pubic bones to three inches above the umbilicus; being the most prominent on the left side, presenting an irregularity of surface, which, together with indistinct sense of fluctuation, gave the impression that the tumor was multilocular. This, on examination, proved to be true. The patient experienced no inconvenience until the last three or four months, during which time she had much difficulty and pain in voiding her urine; and her general health was becoming impaired. The trouble in urinating was caused in this wise: a portion of the tumor had crowded down into the pelvis, carrying the bladder before it, and crowding the womb backward and downward. I saw her one week before the operation and told her what her trouble was. Explained to her the general results of letting such tumors alone, and removing by operations. She decided to have it removed at once, which I did, April 9, 1878, in the following manner:

An incision, two and a half inches in length, was made in the abdominal walls (in the mesial line) down to the peritoneal membrane; a small opening was made in that. A sound was introduced and swept around the tumor in all directions, and no obstructions found, save in the right inguinal region which proved to be the pedicle. All bleeding from the external wound being suppressed, the opening in the peritoneal membrane was enlarged to the size of the external opening. The cyst was seized with a pair of forceps or vulselum, a trochar introduced, the contents evacuated, and the whole then drawn out through the opening. The pedicle was long and small; a double ligature was used and tied upon both sides. The ligatures were brought out at the lower angle of the incision, which was then closed with interrupted sutures of fine silk, a pledget of cotton batting moistened with a weak solution of carbolic acid was placed over the wound, and the whole abdomen covered with a roll of fine cotton batting secured with a flannel bandage. The patient was then placed in bed, a dose of morphine given, and left feeling as comfortable as could be expected. Pulse, beating eighty per minute and fair as to volume. In this case, I used ether as the anæsthetic. Dr. Hathaway, of Howard City, took charge of the patient, and through him I learned that she recovered with but few unpleasant symptoms. Upon my first visit to see this patient (which was a few days before the operation), finding the uterus crowded downwards and backward, with a large cyst lying in front between the womb and pubes, dipping down into the cavity of the pelvis and crowding upon the urethra, producing much pain and difficulty in urinating; and believing the bladder to be above and in front of the cyst, I had a strong inclination to tap the cyst with a trochar and draw off the fluid, so as to give her temporary relief from the urinary difficulty. But as the patient decided to have the cystoma removed in a few days, I desisted that I might relieve her of all her troubles at one operation. This was fortunate—for the patient as well as myself—for, had I acted upon the first impulse, I should have passed my trochar through the bladder, as it lay *below* and in front of the cyst, and *this* operation, I have no doubt, would have been fatal to the patient from the passage of urine into the peritoneal cavity.

You will notice that I have reported ten cases of ovarian diseases, and operations for removal; with six recoveries and four deaths. That three cases were polycystic in their structure. Four cases were multilocular, one case unilocular, and one fbrocystic. Cases representing all the forms of cystic degeneration of the ovaries, save the dermoid cyst. That four of the cases were complicated with ascites, which is an unusually large percentage for the number of cases reported. These tumors varied in size from thirteen to fifty pounds in weight, and were all removed by a short incision in the wall of the abdomen—which I should always recommend when feasible. That the pedicle in my first six operations was secured by double silver and silk ligatures tied on each side, cut short, and the pedicle dropped into the cavity of the pelvis. In my last four operations, the pedicle was secured by double silk ligatures tied upon each side, and the ends brought out at lower angle of the incision in the wall of the abdomen. Statistics show that this plan and the one last mentioned—by ligatures cut short—to be more successful than any other yet adopted. I would, therefore, recommend the use of ligatures with the ends brought out at lower angle of abdominal section as being more simple and just as efficient.

That the abdominal incisions in the first six cases were closed by quilled silver sutures, and in the last four cases by interrupted fine silk sutures. I would recommend the fine silk sutures as being more simple, more quickly applied, just as efficient and producing less irritation.

The after treatment was conducted upon general principles, and symptoms met and treated as indicated. Believing, as I do, that an operation for removal is the only rational treatment for the permanent cure of ovarian cystomas, I would, therefore, recommend it in all cases, save those known to be incurable.

The Cure of Hemorrhoids by the Hypodermic Syringe.

BY EDMUND ANDREWS, A. M., M. D.,

Professor of Surgery in the Chicago Medical College.

In a former number of this journal, I published the secret method of certain itinerant "pile doctors," and asked for information from all physicians who had any knowledge of the practical results of the treatment. This request, supplemented by other inquiries, has brought me responses from about three hundred physicians, and given me more or less knowledge of the results of over three thousand three hundred and three cases treated by the new method. From the material thus collected, I am able to present the following history:

In the year 1871, there lived in the village of Clinton, Ill., a physician named Mitchell. His practice being small, he employed his superabundant leisure in planning a new treatment for hemorrhoids. He was a good thinker, and soon conceived the idea of charging a hypodermic syringe with equal parts of carbolic acid and olive oil, and injecting the contents into the hemorrhoidal tumors. He also devised another and totally different plan, which was to take two large needles with triangular points, like those used by saddlers, and then to pick the piles to pieces, little by little, with the needles. Mitchell, himself, is said to prefer the needle operation, and several others have adopted it from him; but the plan of injections has proved by far the most popular with others, and has recruited, in a quiet way, a surprising number of operators. The secret was sold from man to man, and the price and the enthusiasm rose simultaneously; "State and county rights" to practice it were vended at high rates, reaching in one instance the sum of $3,000. Regular physicians abandoned their practice, and even mortgaged their property for money with which to buy the secret, and set themselves up as itinerants, while ignorant laymen joined in the rush until they filled the whole West with their clamor, and at last whitened the sands of the Pacific shore with their hand-bills.

The chief managers of the business settle in the larger towns in the winter, where they advertise and practice; but as the spring advances, the time when the wild geese begin to fly, they feel the migratory instinct and go from place to place, selling the secret to all who will buy it and operating, meanwhile, on the people of the farms and villages. In this way, they have treated more than ten thousand patients in the States west of the Alleghany mountains. A secret so extensively sold always gets out. Three years ago, I discovered and published it, thus putting a check on the business of selling, and induced large numbers of the regular profession to try the plan among their patients. These physicians have furnished me my best information, but I also opened communication with the principal itinerants, themselves, and induced several of them to come out frankly and tell what they knew, and, by checking one statement against another, was able to sift out pretty well the few attempts at deception.

Mitchell's original plans have excited widely extended thought and experimentation among his followers, so that his two methods have branched out into numerous varieties. The original injection seems to have consisted of equal parts of crystallized carbolic acid and olive oil. The operator exposes the piles to view and smears the anus with an ointment to prevent smarting in case the fluid should chance to drop. He then takes a sharp-pointed hypodermic syringe, charged with the carbolized liquid, and slowly throws a few drops into one of the piles. The pipe is left in the puncture a few moments to prevent the fluid from running out and to allow it to become fixed in the tissue. The pile turns white, and, in the most successful cases, withers away without pain, suppuration or sloughing. Only one pile is treated at a time, and about a week is allowed between sessions until all are cured. The itinerants often advertise their method as "painless," but, as a matter of fact, only about one patient in four gets anything like exemption from pain. Most of them suffer a sharp temporary smarting, and a few have a terrible and prolonged agony. The majority are cured, however, without interrupting their business.

The original plan has sprouted into numerous varieties. Instead of olive oil as the excipient, many use glycerine. Then, every operator has his favorite degree of strength. Several claim that the stronger the fluid, the better it is, and actually inject crystals of carbolic acid melted by heat, while others use mixtures varying in strength all the way down the scale until we find Dr. Weir, of New York, experimenting with one part of acid to twenty or thirty parts of the solvent. The dose injected varies in like manner. Some advocate great caution and only put in from one to three drops, while others crowd the pile with a syringeful, and seek to make it suppurate or slough. I find two men using creasote instead of carbolic acid, and several add anodynes, such as morphine, chloral or iodoform. Ergotine is also a favorite injection, and a great number of mixed formulæ have been imparted to me, some of which contain five or six ingredients. Mr. Colles, of Dublin, injects muriated tincture of iron. Dr. Hill, of Bloomington, Ill., and Dr. Drake, of Hastings Mich., use the iron per-sulphate. Others have tried tannin, chromic acid, tincture of iodine, etc. One itinerant, who writes in a straightforward and manly tone, says that he has experimented with almost every coagulating agent in the vegetable and mineral kingdoms. His preference is for the strongest carbolic acid, and he adds: "The difficulty with all remedies, except carbolic acid, is the suppuration being limited to a small portion of the tumor, or else, like the preparations of iron, causing it to swell and become very painful. Carbolic acid is, so to speak, used up in cooking the blood throughout the entire tumor. The appearance of the pile in from five to twenty minutes shows such to be the fact. Suppuration takes place in three or four days with sloughing. No danger of hemorrhage."

The results of these various methods of treatment may be summed up as follows: In the first place, the needle operation has never become a favorite. I can learn of only five persons who employ it. The following case was probably treated in that way. The patient, a plethoric man, forty-five years of age, went to a quack in Chicago, and, as a result, the varicose hemorrhoidal vein was widely opened. Blood gushed out freely, but, after some time, was arrested in a manner not clearly understood by him. He then returned home in great agony and called for his family physician, by whom I was called in counsel. Removing cloths and compresses, a large opening was found in the vein, plugged with a vial cork. The quack, we presumed, had torn open the thin walls of a dilated vein and, being driven to his wits' end by the gush of blood, finally concluded to cork up his patient like a demijohn.

My informants agree that the injection method seldom fails to cure the disease, but report some serious disasters. The writers know of about 3,304 cases treated in their vicinity by these methods, and, though they cannot always give exact numbers and details, yet the circumstances are such that a case of rapid death from the treatment could not be concealed, though minor troubles, such as pain, sloughing, etc., might frequently escape their notice. It is probable, therefore, that the list of deaths is pretty complete, while the figures giving the minor accidents are too small:

LIST OF ACCIDENTS.

Deaths	9
Embolism of the liver (suspected)	8
Very dangerous hemorrhage	5
Less dangerous hemorrhage	5
Carbolic acid poisoning (recovered)	1
Sloughing (generally but not always confined to the piles)	23
Abscess (of the liver)	1
Severe inflammation	10
Violent pain	83
Stricture of the rectum	2
Permanent impotence	1
Long sickness (two weeks to six months)	6
Relapsed	7
Failed of cure of piles	11
Sundry other accidents	12
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Cases of sloughing and suppuration of the piles are innumerable. Some itinerants use strong injections with the express purpose of producing these results, deeming that the plan of causing them to atrophy without suppuration lacks certainty and permanence.

The list shows that while the deaths are so few that the risk is no greater than in other methods of treatment, yet the minor accidents are very numerous. The imperfection of the reports renders a thorough study of the accidents impossible, but the following information has been gleaned. One of the deaths was caused by inflammation followed by immense abscesses, erysipelas and pyæmia. The patient died on the fifth day. Another death apparently resulted from embolism of the liver. That viscus nearly ceased its function; the stools were light-colored and scanty, the skin yellow and all the lymphatic glands of the groin, axillæ and neck became enlarged. A full dose of calomel always brought temporary improvement, but no permanent benefit. The patient lingered along and died unrelieved about one hundred days after the operation. The next fatal case was that of a man, eighty-four years of age. The person who injected the pile said it was "very large, and very deeply seated." It was suspected that he mistook the enlarged prostate for a hemorrhoid. Be that as it may, the patient was attacked with violent pain and retention of urine, and though relieved by the catheter, died the third day. There is no proof, however, that the prostate was injected, nor that it would be fatal if it were.

The fourth death was also attributed to injecting the prostate, but no symptoms are given.

The five remaining deaths are so vaguely reported that I am unable to give any particulars about them. It is possible that three of the reports refer to the same patient, and ought to be counted as one, in which case the whole number of deaths is only seven. This number of fatal results in 3,300 cases, treated often in the most reckless and ignorant manner, is certainly not large, and tends to show that the injection method is as safe as any other, so far as life is concerned.

The same relative immunity appears respecting hemorrhage. Five dangerous cases of it are reported, but in most, if not all of them, it occurred from the foolhardy practice of allowing the patient to take long rides and walks when he should have been in bed; but with all this imprudence the hemorrhage cases are fewer than occur after the use of the clamp and the ligature. Allingham reports more instances of hemorrhage after his favorite operation, the ligature, than I can find among all these cases of injection.

The chief objection of the profession to this operation has been the fear of embolism. The two lower pairs of hemorrhoidal veins send their blood by the route of the internal iliacs to the heart, but they are small, while the upper pair is much larger, and carries the great mass of the blood of the hemorrhoidal plexus to the liver; hence we should expect that embolism, if it occurred at all, would be of the latter organ. The facts agree with the indications of the anatomy, for not a single case is reported of a sudden death such as proceed from clots swept to the heart and lungs, but there are eight instances of suspected embolism of the liver. Only one of them died, and there was no post-mortem examination, so that positive proof is wanting.

The first is the fatal case of liver trouble already described.

The second was marked with abscess of the liver, but the patient recovered.

In the third case the patient was attacked, one hour after injection, with severe pain in the liver. After some time the physician succeeded in arresting the pain, and had no further trouble, but he feared to repeat the injection.

In the remaining cases it is simply reported to me that the patients, after operation, were attacked with disease of the liver, but no particulars are given, except the statement that they did not die. It is probable that in some of them the disease of the liver pre-existed, and was the cause of the piles, and not the consequence of the operation. On the whole, there does not appear to be any decided danger of embolism if the case is carefully handled. I may mention that Dr. Whitmire, of Metamora, Ill., practices tamponing the upper part of the rectum for 24 hours to prevent any emboli from moving in that direction.

Sloughing and suppuration of the piles generally follow large and concentrated injections, but not the small and dilute ones. A few cases only of extensive abscesses have occurred

The most frequent of all accidents is the occurrence of severe pain. The verge of the anus is extremely sensitive, and injections put in near that circle are liable to produce fearful distress, but above the verge the sensitiveness rapidly diminishes, so that much less suffering is entailed by the injection of internal piles. In about one-fourth of the patients, the pain is very slight. Dr. Weirs, of New York, injected two series of patients—one with strong, the other with weak carbolized solutions, using in the latter only one part of carbolic acid to ten, twenty, or thirty of the excipient. He found that the pain and abscesses followed the use of strong injections, but were escaped when weaker ones were used. The remaining accidents in the list are not peculiar to this operation, nor greater in number than habitually occur in other methods. The operation was a new one, and its conditions of safety were unknown. When we consider that many of the operators were ignorant blockheads, with no qualifications for the business except a bottle of carbolic acid and a hypodermic syringe, and with no idea of efficiency but to force into the hemorrhoidal plexus of veins all the caustic liquid it could be made to contain, we shall not be surprised that a few deaths and some minor accidents have occurred. Had the method not been of itself an unusually safe one, these men would certainly have slaughtered their scores of victims, for the difference is world-wide between their ignorant injecting and cautious scientific surgery.

If the following rules are observed, I believe that the method of hypodermic injection will be less painful than any other, and equally safe:

1. Inject only internal piles.
2. Use diluted forms of the remedy at first, and stronger ones only when these fail.
3. Treat only one pile at a time, allowing from four to ten days between the operations.
4. Inject only one to six drops, smearing the membranes with cosmoline to guard against dripping. Inject very slowly and keep the pipe in place a few moments, that the fluid may become fixed in the tissues.
5. Confine the patient to bed the first day, and also subsequently if any severe symptoms appear. Prohibit any but moderate exercise during the treatment.

Under all treatment, as well as without treatment, piles are subject to possible hemorrhage.

When the bleeding vessel cannot be found and promptly controlled, Allingham gives the following method of using the tampon: He takes a good-sized sponge and fastens a strong double string through its center. (He prefers a bell-shaped sponge, inserted with the open end downward.) Having pushed the sponge up the rectum some inches beyond the bleeding point, he fills the parts below it with cotton dusted with powdered alum or persulphate of iron, and ties a stick across the finished tampon with a double string. By turning the stick around like the handle of a gimlet, he twists and tightens the string, forcing the tampon firmly up against the sponge, and causing it to spread laterally and to compress the bleeding vessels. He advises to put in a large catheter with the tampon to give exit to the flatus. By the help of opiates the tampon is often tolerated several days.

My final conclusion is that the wild itinerants of the prairies have really made a valuable contribution to scientific knowledge, and that the cautious injection of hemorrhoids with carbolized solutions will remain as one of the permanent operations of surgery.

The number of physicians who have contributed to this investigation is so large that it is impossible to give separate credit to each one, but I return them collectively my thanks, and especially to Dr. J. Burry, of Raub, Ind., who was kind enough to write to over thirty medical men in my behalf.

The literature of this subject is very scanty, and is mostly covered by the following references:

The Chicago *Medical Journal and Examiner*, October, 1876. Article by Prof. E. Andrews.

The New York *Medical Record*, Vol. XI., p. 112.

The Maryland *Medical Journal*, June, 1878.

The London *Lancet*, p. 228, 1877. Article by H. A. Reeves.

The Philadelphia *Medical and Surgical Reporter*, July 6, 1878.

The Cincinnati *Eclectic Medical Journal*. Three articles, in 1874, 1877, and December, 1878.

The Toledo *Medical and Surgical Journal*, November, 1877. Article by Prof. J. H. Pooley.

The Louisville *Medical Journal*, August, 1878. Article by J. M. Matthews, M. D.

The New York *Medical Journal*, March, 1879. Report of R. F. Weirs, M D., to the Therapeutical Society.

The *American Bi-Weekly*, April 27, 1878. Paper by Dr. J. M. Matthews before the Kentucky State Medical Society. There is also, in the same journal, February 16, 1878, a paper read before the same society by A. B. Cook, A. M., M. D.

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No. 6, Sixteenth street, Chicago, Ill.

Reports of Societies.

Detroit Academy of Medicine.

FEBRUARY 11th, 1879.

In the absence of the President, Dr. Lyons, the meeting was called to order by Dr. Cleland.

EXHIBITION OF PATIENTS.

Dr. Yemans—I saw this person for the first time about two years ago, when she had an attack of ovaritis. About fourteen years since she suffered from a severe form of variola, and, to hide, to a certain extent, the cicatrices left by the disease, she has constantly employed ointments and washes, and to-night I bring her before you to show you their effects. She first used the "Bloom of Youth," but, when her means prevented her from purchasing so expensive an article, she commenced to buy "Flake White," in small quantities, five cents' worth, and make her own solutions for the toilet. You see that she now has a complete paralysis of the extensors of both forearms, and this condition is, at the present time, of eight months' duration. Although told, on applying for treatment, to stop immediately the use of the wash, she nevertheless continued to apply it until about three weeks ago. She has had potassium iodide internally, and electricity to the disabled muscles for some time back, but no improvement whatever is as yet apparent.

[The verbal communication appearing on page 184 of the LANCET should have been credited to Dr. J. F. Noyes.]

Dr. Hawes—I have seen three cases of paralysis due to similar causes; one of the arms, one of the face, and the last one, caused by the use of a hair dye, where the paralysis was almost general.

Dr. Chapoton—The paralysis in the doctor's case has now continued for such a length of time that granular degeneration and atrophy of the nerves and muscles has no doubt taken place to a considerable extent. By the interrupted current we might discover whether any contractile power whatever still remained, and if any were found, potassium iodide, electricity and nux vomica, given in doses to quickly produce its physiological effects, should be immediately administered.

Dr. Robertson—I likewise fear that the trouble has now existed for too long a time to obtain much good from any treatment. To the remedies already mentioned I would add the use of cold douches, frequently repeated.

Dr. Petershausen—If the patient could possibly obtain them, I would advise the daily use of warm baths.

Dr. Bradley—I have no personal experience in the treatment of this class of troubles, but I remember seeing the report in the *British Medical Journal* of the cure of several hopeless cases of lead paralysis by the persistent use of electrical baths; one of the electrodes being placed in the water, whilst the other was passed up and down over the disabled muscles.

PATHOLOGICAL SPECIMENS.

Dr. Hawes exhibited a very fine sample of the granular or hob-nailed liver, and a kidney presenting the lesions of chronic Bright's disease.

PREVAILING DISEASES.

Dr. Petershausen—Since our last meeting I have again had some genuine cases of diphtheria. I lost one case—in a family in which all the other members were affected with the same trouble. The child had a number of red spots all over its body. Some years ago, in New York, it was remarked that all those cases which presented such an eruption invariably died, and so it was in this child. My first patient in this family kept continually spitting upon the carpet of the common room, and I ordered them to take it out, but they refused to do so. I believe that this filthy carpet was the source of contagion to all the other members. In all my cases I have always found that the surroundings were in some way or other in a filthy condition.

VERBAL COMMUNICATIONS.

Dr. Hawes—On January 20, I made a post-mortem examination of a female patient, aged 54, who had died ten hours before in Harper Hospital. I belive the notes of the autopsy will prove interesting on account of the measurements which were taken of different parts of the body. The circumference of her thigh was 32¾ inches; of her calf, 28½; of her ankle, 17½. The fat from the skin to the peritoneum measured nine inches in thickness. The circumference of the hips was fifty-eight inches. When she came into the hospital she weighed 430 lbs, but during the two months of her stay she lost 150 lbs. The only lesions found in the internal organs was a slight aortic obstruction and a commencing cystic degeneration of one of the ovaries.

Dr. Cleland—Peritonitis is neither rare nor are its manifestations as a rule obscure. Its course is run in an uniform manner, and its termination, from the character of the attack, is usually easily prognosticated. Yet, occasionally a case will meet you in which all these facts are set at naught, and the attack will terminate in a manner totally unwarranted by the symptoms presented. Such a case was that of Chas. B.

The patient was an overgrown lad of 17, apparently of good muscular development, but, in fact, feeble physically and mentally. I was called to see him on the 27th ult., and found him suffering from what appeared to me to be a slight strain of the abdominal muscles, the result of a wrestling bout with his brother, which had taken place the day previous. He had no fever; was able to be up and about, though he said it pained him to remain on his feet. Superficial pressure produced pain, though firm and deep pressure could be borne very comfortably. I thought little of the case, but ordered him to keep his bed and to apply warm fomentations. On the following day I was again sent for in the morning and was informed that Charley had had a chill. When I saw him he complained of pain a little to the left of the umbilicus, which was so acute that the slightest pressure could not be tolerated. His pulse was small, thready and 120 per minute. His temperature under the tongue was of the known as of the unknown, of the virtuous as the vicious. Even within the past year the entire country has been shocked by finding some of its most honored citizens in the tanks of dissecting rooms.

Clear it should be to every citizen that the doctors will have bodies to dissect—that they must have them in order to be doctors; clear, also, it must be that dissection in no sense injures the dead. If, now, dissection be confined to the bodies of those who have no relatives, then surely the feelings of the living will be uninjured. This is all that the profession has asked. Far be it from the wishes of the kindest of all classes of men to in any way shock or do violence to natural reverence for the abodes of dead friends. Thousands die yearly in our asylums, poor-houses, jails and hospitals who have no relatives. To have these bodies given the profession for dissection would seem the wise and proper thing to do. But in most States this has been forbidden. We have the hope that the bill now before our State Legislature may become a law. If so, its provisions will be essentially such as we have stated above. The text of the bill is as follows:

SECTION 1. *The People of the State of Michigan enact,* That any member of either of the following boards of officers, to wit, the board of health of any city, village or township, the mayor or common council of any city, any officer or board having direction, management, charge or control in whole or in part of any prison, house of correction or jail, or any county superintendent of the poor or keeper of poor houses or alms-houses, and any physician in charge of any alms-house in this State, shall deliver the dead bodies of such persons as may be required to be buried at the public expense (or the expense of any public institution). when so requested, to any member of the medical faculty of the University of Michigan, or Detroit Medical College, by delivering such body, within forty-eight hours after the death of such person, to the express company or freight company at the nearest railroad station, properly placed in a plain coffin as for burial, and inclosed in a strong box plainly directed to the person and place as directed by the consignee, to be used for the advancement of anatomical science, preference being always given to the request of the faculty of the medical department of the University of Michigan. And such boards, officers, common council, or person making such shipment shall take the usual shipping receipt for such package, and shall notify the consignee of such shipment by letter mailed on the day the package is delivered to the express or freight company. And such officer, board, common council, or person making such shipment shall also enclose in said letter a statement of the costs and expenses which have been incurred in the procuring of the coffin, box, preparation of the body for shipment, and shipping the same, not exceeding in any one case the sum of ten dollars. And upon the receipt of such consignment and statement of expenses as aforesaid, the dean of the medical faculty of the University of Michigan, in case the consignment was to or for the benefit of the medical department of said university, or the president of the medical college of Detroit, in case the consignment was to or for the benefit of the said medical college, shall immediately forward to the officer, board, common council or institution incurring such expenses the amount thereof: *Provided,* That the University, Detroit Medical College, and each and every medical institution shall not receive into their possession such bodies as are procured in this State other than those provided for by the provisions of this act. And every individual, officer, or party violating this provision shall be deemed guilty of a misdemeanor.

SEC 2. No such dead body shall be shipped as aforesaid if, before the same shall have been actually shipped, any relative of the deceased request that the body shall be buried, or if such deceased person was a traveler and unknown in the community were the death occurred.

In our previous law any friend could claim the body; hence as some one about the institution could act as friend, all bodies were claimed. As the present law stipulates that relatives only can claim the body for burial, we have hopes of its practical efficiency. But it strikes us as only right that if the State be cômpelled to support and bury any of its citizens, then such bodies should belong to the State, and in its interests and those of its citizens at large be given to the profession for dissection. Further, those who die while serving out sentences in prison for breaking the laws of the State should be given over to advance the interests of science. In these ways abundance of dissection material should be freely placed at the disposal of all medical schools, and the study of practical anatomy encouraged to the utmost. Perhaps if it were known that all inmates of our penal and pauper institutions would at death be turned over to the advancement of science, relatives might be stimulated to make greater exertion in behalf of the thriftless. The premium now paid to pauperism would be lowered, and we might hope to have fewer paupers. Possibly the idea might dissuade some from entering upon, or continuing in a life of crime. There can be no question of the right of the State thus to dispose of its dead paupers and criminals. As to its wisdom, we are fully convinced that it would benefit all concerned. The graves of the virtuous and prudent would be sacred to affectionate remembrance. Body pulling would be a thing of the past. Scientific men would be furnished with abundance of excellent material for the prosecution of their investigations, and thus they would be able best to advance our knowledge of anatomy and pathology, and so the entire material interests of the race. Pauperism, which is alarmingly on the increase, would receive a healthy check. Extra inducements would be offered for proper obedience to the laws of the land. These and other considerations should be persistently urged upon the people, until they become willing to enact proper laws in this matter.

[Since the above was penned, we learn that the above-quoted bill was killed in the State Senate.—Ed.]

National Board of Health—A New Bill to Increase its Powers and Labors in the Matter of Quarantine.

In our April issue we gave the essential features of the bill authorizing the formation of a National Board of Health. Since then a new bill has passed both Houses of Congress which materially adds to the powers of this board. Evidently it was prepared with great care, in the hope of obviating all objections urged against national quarantine.

It provides for the national sanitary supervision of all vessels engaged in the transportation of goods and persons from foreign ports in which infectious diseases exist to any port in the United States. All such vessels shall be required to obtain from the Consul, Vice Consul or other consular officer of the United States at the port of departure a certificate in duplicate, setting forth that said vessel has complied with all the necessary regulations, and possesses a clean bill of health. The port of

Havana is especially looked after in this provision. The inspector's certificate must show that he personally has so examined the vessel in every part that he can certify that it may land its cargo and passengers at any port of the United States without endangering the health of said port. Any vessel which enters any United States port without such certificate shall pay a forfeit of five hundred dollars. The National Board of Health is charged with the execution of these provisions.

The board, further, is to keep fully posted as to the sanitary condition of all ports, foreign or domestic.

It is provided, also, that this board "shall correspond with similar local officers, boards and authorities, acting under laws of the States, in sanitary matters, to prevent the introduction and spread of contagious and infectious diseases from foreign countries into the United States, and from one State into any other State by means of commercial intercourse, or upon and along the lines of inter-State tracts and travel." In times of emergency, said Board of Health may lawfully confer upon any such local officer or board within or near the locality where his authority is exercised power also to enforce the provisions of this act. Another section provides that suitable rules and regulations shall from time to time be promulgated, so that when cholera, yellow fever or other similar contagious diseases shall be ascertained by the board to exist in any part of the United States in such form as threatens its spread, as to prevent, as far as practicable, the communication of the same to other localities within other States by means of vessels or vehicles engaged in transporting passengers or merchandise, whether by land or water. In such case, the Board of Health shall select suitable localities for establishing stations on the river and other lines of inter-State commerce and travel by railroads, and may cause to be erected necessary temporary buildings for the disinfection of passengers, baggage, cargoes, vessels and vehicles, and may enforce such rules and regulations relating thereto as may have been prescribed therefor by said Board of Health.

To do all this, and fulfill the requirements of the original bill, only fifty thousand is allowed. Should any emergency arise, certainly this sum would prove utterly insufficient. The friends of quarantine must be gratified at the passage of this act. In the interests of humanity, it is hoped that their fondest anticipations may be realized.

Memoranda.

College of Physicians and Surgeons of Baltimore, Md., March 4th, graduated a class of seventy-nine.

Medical College of Virginia, March 4th, graduated a class of fifteen.

Atlanta Medical College, March 4th, graduated a class of thirty-five.

Medical Department of Michigan University, March 25, graduated a class of thirty-two. More to follow in June.

Medical College of Indiana, February 28, graduated a class of sixty-six.

Medical Department University of Louisiana, March 20, graduated a class of thirty-two.

St. Joseph's Hospital Medical College, February 28, graduated a class of nine.

The National Medical College, March 20, graduated a class of eleven.

Dr. Thomas Waddel, of Toledo, Ohio, died March 9, aged 35. He was well known as a writer for medical journals, as an editor and medical teacher, and gave promise of a useful and brilliant future. Another *worker* gone.

Dr. Geo. B. Wood died March 30th, in his 82d year. He was well and widely known as a teacher and writer. The United States Dispensatory is said to have yielded him and Dr. Bache over one hundred thousand dollars.

At the last census there were in Austria 183 men and 229 women who had attained or passed the age of 100 years. A marriage is announced between a man aged 88 and a woman aged 100. This woman had a daughter 80 years old and a great-grand-daughter of 16.

The following official notice fully explains itself. We regret that Dr. Jenks has deemed it best to exchange his field of work from Detroit to Chicago. We shall greatly miss our genial friend and fellow-worker, and we bespeak for him in his new field the most abundant success:

CHICAGO MEDICAL COLLEGE.

DEAR DOCTOR: CHICAGO, April 14, 1879.

The Faculty of the Chicago Medical College have the pleasure of announcing that PROFESSOR EDWARD W. JENKS, M. D., of the Detroit Medical College, has accepted an appointment to the Chair of MEDICAL AND SURGICAL DISEASES OF WOMEN AND CLINICAL GYNÆCOLOGY. He has already acquired a national reputation so prominent, in this department, as a teacher and operator, that it is unnecessary to speak of the advantages which are thus secured to the College. DR. JENKS will change his residence and field of labor to this city at an early day, about October 1st.

In behalf of the Faculty,
JOHN H. HOLLISTER, M. D.,
Secretary.

Dr. Isaac Hays died April 13, aged 83. For fifty-one years he had been editor of the *American Journal of Medical Sciences.*

The so-called *facies hippocratica,* literally translated from the original, is described thus: "A sharp nose, hollow eyes, collapsed temples; the ears cold, contracted, and their lobes turned out; the skin about the forehead rough, distended and parched; the color of the whole face green, black, livid or lead colored."

Quetelet states that an infant grows in length nearly seven and one-half inches during the first year of life; in the second year, only half this amount; and in the third year, only one-third of it. From the fourth or fifth year of life the increase is little over two inches annually till the age of puberty.

The April issue of the *Physician and Surgeon,* of Ann Arbor, has reached us. Its editors and publishers vie with each other in making a valuable and handsome medical journal. Its original articles, translations, clinical reports, abstracts, book notices and editorial contents are of an unusually high order of excellence.

[illegible] Michigan medical bill, the *Medical Record* [illegible] law, Michigan will soon share with [illegible] being the paradise of quacks.

[illegible] in honor of John Nicot, who intro- [illegible] France in 1650. Tobacco is derived from [illegible] used by the Indians for inhaling the

[illegible] was born the other day at Seville, Ohio. [illegible] height, 30 inches; breast measure, 24 [illegible] inches; head, 19 inches; foot, 5½ inches long. [illegible] M. V. Bates, is 7 feet 7 inches in height, and [illegible] inches higher. Mother recovered well.

[illegible] Dr. John C. Riley, of Washington, D. C., [illegible] committee for revision of the American Medical [illegible] without a single member of authority to convoke [illegible]

[illegible] Stillé has withdrawn his resignation as professor of [illegible] theory and practice of Medicine in the University of Pennsylvania.

In New York State the total receipts for all the public charitable institutions was for last year $7,909,791.22—the total disbursements were $7,408,753.71.

At the late commencement of Jefferson Medical College, Prof. Meigs presented Prof. S. D. Gross a laurel wreath in the following terms:

"This chaplet now upon thy head I lay,
Thou Ambrose Paré of the present day;
For thee the laurel and the bay, thou skilled
Amongst the foremost of our ancient guild.

Thou noble, learned lover of learning,
Whom Oxford honored with just discerning;
Thou whom thy brethren all delight to praise;
Thou good friend of my early, struggling days."

The National Board of Health is made up as follows, viz., Dr. S. M. Bemis, of New Orleans, Dr. Henry J. Bowditch, of Boston, Dr. Stephen Smith, of New York City, Dr. H. A. Johnston of Chicago, Dr. James L. Cabell, of Virginia, Dr. T. S. Verdi, of Washington, Dr. R. W. Mitchell, of Memphis, Dr. Hamilton, of Marine Hospital Service, Dr. J. S. Billings, Dr. Grinnell of the navy, and Gen. Phillips of the Department of Justice.

Dr. H. B. Baker reports that in Lansing, Michigan, the death rate for January, 1879, was 8.24 per 1,000; for February, 9.13 per 1,000, and for March 7.07 per 1,000.

A careful study of the import drug trade of the United States shows, for the past year, a diminution of its money value, but an increase of such commodities as are brought hither from foreign countries in the rough condition. These articles are mainly employed in home manufactures for giving additional value to some of our products, or elaborating more refined articles of merchandise. Thus it is shown that home industry and skill are rapidly improving, and that much that we have been accustomed to buy in a finished condition is now made by ourselves.

"The chaff, the controversies and worn-out theories which beset the practitioner and distress the student are chargeable to men who have written for reputation or notoriety rather than from experience, reflection and classified knowledge."—*Dudley.*

"The American Medical College Association is an imperial congress in medicine in this country. It has strength and power; there is no authority above it in matters pertaining to the standard of medical education. It has already exercised its prerogative over the length of the college year and time of study. Will it now strike the key-note of a higher medical education—will it elevate the standard or continue to trail it in the dust?"—*Mercer.*

Dr. Thomas Addis Emmet states that in all his vast experience he has never met a case of self-abuse in the adult woman which could not be traced to disease as the cause and not the effect. The same author compliments the profession thus: "No portion of the body has suffered more in consequence of incapacity on the part of the members of the profession, many of whom from ignorance have been unable to appreciate in detail the true bearing of all pertinent points. Nor have women suffered much less from the gross carelessness of some, in not making a thorough investigation, even when they may have possessed the requisite knowledge. Under the guise of surgery, the uterus has been subjected to a degree of malpractice which would not have been tolerated in any other part of the body. Its cavity has been and still is made the receptacle for agents so destructive that no conscientious man would employ them for the treatment of disease in any other part of the body."

Editor's Book Table.

Any Book noticed herein may be had of E. B. Smith & Co., Publisher and Booksellers, Detroit, Mich.

Emmet's Principles and Practice of Gynæcology.*

Very correctly, this work is called Emmet's. It begins, continues and ends with Emmet's observations—his experiences, his operations, his methods of treatment, his studies, and his conclusions. And yet a very careful reading attests the fact that it very nearly represents the present state of gynæcological science and art. While assimilating all the work of co-laborers, he has of himself contributed largely to the creation of that art called gynæcology. Few have had the rare opportunities of Dr. Emmet, and none have better improved that which was at their disposal. A continuous service of twenty-five years in the Woman's Hospital of the State of New York, nearly half of the time as surgeon-in-chief—a private hospital for diseases of women, in operation for over fifteen years—and an extensive consulting practice, have together afforded a field for clinical research available to such a degree to no other living gynæcologist. From the diseases that thus were presented to him for treatment, the author has endeavored to ascertain and formulate the laws regulating and governing them, and to so analyze the results of treatment as to enable the profession to benefit by them. To do this, numerous histories and facts have been compressed into statistical tables. Compiled with the greatest care, by the author himself, we may be assured of their literal accuracy. Most of the illustrations are also original. From the nature of the work, all detailed account of the anatomy, and physiology and histology of the female generative organs is omitted. This omission affords space for the discussion of other and perhaps more important subjects. Omitting the statistical tables, the entire work is eminently a readable one. It is more like a narrative of personal experiences and thoughts on this subject than a set treatise. On every page, and in every word, we discover the spirit of a broad thinker and wise practitioner. Some of the cases may be a little prolix, and the statistics troublesome to understand, still they are original contributions of more than ordinary value, and he who reads them in the spirit of their author will forgive the prolixity, and enjoy the dryness.

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*THE PRINCIPLES AND PRACTICE OF GYNÆCOLOGY. By Thomas Addis Emmet, M. D., Surgeon to the Woman's Hospital of the State of New York. With one hundred and thirty illustrations; pages 856. 1879: Philadelphia, Henry C. Lea.

It is not to be expected that the work contains the ultimatum of research, but only a faithful account of stock as it now stands in the mind of an illustrious worker. Sure are we that any practitioner of medicine, specialist or otherwise, who will read carefully this volume, will find that he possessed a clearer insight into a thousand problems that have hitherto perplexed him.

Lack of space prevents our full discussion of its special teachings.

The opening chapter should be reprinted and placed in the hands of every mother in the land. Dr. E. H. Clarke's work on the education of girls is endorsed emphatically, and the author says that the evil results of modern female education are even more serious than Dr. Clarke represented. From his own observation, Dr. Emmet thinks that the physical development of our women is becoming deteriorated. The causes of this deterioration, he admits, are obscure. Among them may be claimed our climate. This taxes the nervous system at the expense of nutrition, and stimulates to constant action, rendering us a restless people, in both mind and body. We develop early, and live a life crossed by more than our share of dyspepsia, neuralgia and other nervous disorders. With no lack of perseverance, we generally accomplish an undertaking, but the end is gained only at the expense of a vast amount of wear and tear. Our hope for the future lies in our peculiarity that we always seek the most direct method by which we may accomplish a purpose. He then points out the need of expending all the nerve force of the child upon its organic growth, leaving the training of the brain for a later period. Hence, the girl of the better classes should be kept a child as long as possible in her associates, dress, diet and all other habits of life. At the time of expected menstruation she should be kept from study or hard work of any sort until the periods have been well established. As this is gained, the number and extent of her studies may be increased, until she is able to endure study as well as young men. Her entrance into society would thus be delayed several years, but she would be so much improved, mentally and physically, as to give promise of a stronger, happier and healthier life. In the poorer walks of life, girls reach their full physical development sooner and menstruate later. This results from their simpler mode of life, by which less nerve force is wasted. Thus a simpler mode of life better fits a girl for early marriage, and renders her more capable of discharging her duties as a mother. In the chapter on surgical instruments and appliances we find a full description of the author's method for giving hot water injections. The importance of this procedure is often insisted upon in various parts of the volume. The chapter on the mode of examination and the chief points to be observed in forming a diagnosis, and recording cases, is admirable in all its features. Those who follow its suggestions will find that their guide is a safe one.

No attempt is made to lay down an accurate classification of female diseases. Still he finds it convenient to refer all to faulty nutrition or accident. Under the head of faulty nutrition may be classed the simple form of congestive hypertrophy sometimes found in a woman who has never been impreg as a protest on the part of nature against the barren state of the woman. Few unmarried women reach the age of thirty-five without suffering more or less from this condition whenever the function of nutrition becomes impaired from the nervous disturbance which is likely to be its earliest manifestation. If nutrition improves, this condition disappears and the system becomes reconciled to the state of celibacy. When this equilibrium is not established, some permanent uterine disease is likely to be set up, generally in the form of a fibrous tumor.

As a similar protest of nature, the same congestive hypertrophy accompanies sterility. It matters not whether the sterility be due to means taken to avoid conception, or ill-assorted marriage, or prostitution. Dr. Emmet thinks that the presence of semen in the vagina is the natural stimulus for relieving the congestion of the female generative organs induced by sexual excitement. Very clearly he points out the relations of perverted nutrition to the formation of new growth. Thus fibrous tumors are more apt to occur in women over thirty who have passed their lives in a state of celibacy. Malignant diseases are most apt to occur in women whose superfluous nerve force through the whole period of their sexual life has been fully absorbed in child-bearing.

The chapter on the principles of general treatment is emminently practical, abounding in valuable suggestions and hints. He specially emphasizes the importance of occasional brisk purgatives. Even debilitated persons are thus benefited by the relief afforded to the portal circulation, and so to all the abdominal glands. For many cases he recommends the use of the Rigby mixture, made by dissolving an ounce of sulphate of magnesia in seven ounces of water and a drachm of diluted sulphuric acid. From one to two tablespoonfuls is to be taken early in the morning in a little water. The special value of the mixture lies in the fact that it does not constipate. The most minute directions are given to all details, even the most trivial. Nor is the moral management of the case neglected. Diet, ex-
thing, etc., are all considered. In fact, as the author
the chapter, as of the entire book, is to im-

press the reader with the fact that success in the treatment of diseases of women lies wholly in attention to minute details. The very features that we have mentioned will tend to restrict the popularity of the work. Yet we are of the belief that it is one of the best original works on the diseases of women published in this or any other land. We heartily commend it to the careful study of every medical man. The publisher has issued it in his usual substantial manner.

Green's Pathology and Morbid Anatomy.*

Pathology is an ever-changing field. New researches in many directions modify our pathological conceptions. Morbid anatomy, too, is becoming more and more complete in a thousand details. The work before us is a faithful compilation of these changes, in so far as they have an interest to the medical student. Wood cuts from the author's own microscopical preparations have, in considerable numbers, been added to this edition. The first part of the work is exclusively devoted to the consideration of morbid processes which are characterized mainly by alterations in nutrition; the *second*, to those in which an altered nutrition is associated with certain changes in the blood vessels and circulation, and the third, to changes in blood and circulation alone. The treatment of the several morbid processes begins by first describing the general pathology of each process, and then the same process as it occurs in the different organs and tissues. In discussing the modern cell doctrine, he shows "that in some exceptional cases, a cell is constructed of a simple mass of protoplasm without nucleus or cell wall. But that the nucleus is an exceedingly constant and almost invariable element. The cell wall is much less constant, and being the result of a retrograde change in the outer layers of the protoplasm, it must be regarded in point of vitality as inferior to the result of the cell." Protoplasm itself is an elementary organism capable of exhibiting all the phenomena of life, is an unstable albuminoid compound which is insoluble in water and coagulates at death. Its consistence varies from fluid to a more or less solid consistence. Of all the factors entering into the cell, the protoplasm is the most important, as it contains its life, its powers of movement, of growth, of development, and of reproduction. Hence the author uses the term *cell* to designate the most elementary factor of the tissues which is capable of exhibiting the phenomena characteristic of an independent organism, irrespective of cell, wall, or even nucleus.

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*AN INTRODUCTION TO PATHOLOGY AND MORBID ANATOMY. By T. Henry Green, M. D. Third American from fourth English edition. Cloth; pages, 331; 1878. Philadelphia: Henry C. Lea.

Very graphically are portrayed the results of arrested nutrition. In the muscles, this is attended by a rigidity that, when general, is known as *rigor mortis*. This comes on after death, as soon as the muscles have lost their irritability. Hence the time after death at which it will appear depends on the state of nutrition of the muscles at that time. The more healthy and vigorous the nutrition, the longer the time ere it ceases and the rigor mortis supervenes.

Thus in people who from accident die in perfect health, the rigor mortis does not come on until from ten to twenty-four hours after death, while it is very marked and lasts two or three days. From those who die from some exhausting disease, in which the nutrition becomes much more impaired, the rigor mortis appears very soon, is very slight, and may pass off within an hour. Kuhne's researches have shown that the real nature of the muscular change is a coagulation of the albuminous substance.

As disintegration begins, the rigor mortis disappears. The account of that form of impaired nutrition known as fatty degeneration is excellent. Root's researches respecting the source of fat in that acute form of fatty degeneration which is produced by poisoning with phosphorus, are approved. Thus it appears that (1) the transformation of albumen, which takes place in cells, is independent of the supply of oxygen, but that if the oxygen be deficient, the fat and other products of the transformation being incompletely oxidized, accumulate in the cell. (2) The presence of fat in the cells may thus be due to increased transformation of the albumen, or to diminished oxidation of the products of its decomposition. (3) The fatty degeneration in poisoning by phosphorus is due both to an increased transformation of the albumen of the cells and to diminished oxidation of the fat and other products of the transformation. Our author accepts the view that the milk globules are formed from disintegrating cells lining the lobules of the mammary gland. This view may be correct, but it is widely disputed. We have no space farther to quote from this little work. The whole of it we have perused with profit and pleasure. It is singularly free from misstatements and half statements. It would be an excellent book for every medical student to master entire. We cordially commend it to all such, and to all teachers of such students.

Frerichs on Diseases of the Liver—Vol. I.*

The diseases of the liver are confessedly difficult in every part of their study. Its enormous size, its location, and the multiplicity of its functions, all render its disorders in the highest degree obscure. In all ages of the world it has been largely blamed for indefinite ills ascribable to no other organ. When unable in any other manner to arrive at a diagnosis, it has been and is too common for the physician to say it is liver disease. Any scientific study of the pathological status of this organ was impossible until its structure and functions were unraveled. Curiously this study has resulted in demonstrating that at no time in the past has the relative importance of diseases of the liver been over-estimated. It will be remembered that the following physiological points are tolerably well established: (1.) The liver cells form glycogen from the sugar and albuminous materials brought to it by the portal vein. This glycogen, by a ferment constantly brought to it through the blood, is gradually transformed into glucose as the system needs it, and carried into the general system by the veins and arteries. In this way it acts as a storehouse of the surplus materials thrown into the system at each meal. From this storehouse, by the mechanism already noted, the system is uniformly supplied with the materials and force needed to perform its varied activity, and provide for its own growth, development and repairs. The vascular and nervous mechanism by which this complicated process is adapted to the varying conditions of the body are of the most intense interest. (2.) By the activity of its cells and bile ducts the liver separates chloresterine from the blood and empties it into the alimentary canal. Being a product of tissue metamorphosis, the removal of it in this way makes the liver an excretory organ. Besides this it excretes other substances, notably the coloring matters of the bile, which result from broken-down red blood corpuscles. (3.) The liver produces de novo, the bile salts, and in this it is a secretory organ. (4.) It seems probable that the liver destroys various organic substances—the results of tissue change—which otherwise would act as poisons to the organism. But omitting this last, we have the liver cells acting at once to store up and carefully and uniformly distribute the food as it is absorbed from the intestinal canal, to excrete chloresterine, etc., and to secrete the bile salts.

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*CLINICAL TREATISE ON DISEASES OF THE LIVER. By Dr. Fred. Theod. Frerichs. In three volumes; vol. 1. Translated by Dr. Chas. Murchison. Cloth; pp. 224. 1879. New York: Wm. Wood & Co.

It will be apparent on a moment's reflection that the disturbance of any one of these functions of the liver cells would result in a disturbance of the others, and indirectly to a greater or less extent of the entire body. The book before us is the first volume of a very celebrated treatise on the clinical aspect of this whole subject. For the first time, it is now placed before the profession in a form such as renders it possible for all to possess it. The translator, Dr. Murchison, is scarcely less celebrated than the author for his success in studying hepatic affections. The original work was issued in 1858, and the translation made in 1860. We could have wished that it had been rewritten and translated in 1878, as we cannot but think that in this case the work would have been more useful. In general, the work is one of clinical research, and based upon the following view of its relations: "Scientific medicine, in its entire extent, constitutes its groundwork; this paves the way for clinical observation without reference to any practical results. The diseased individual himself, in every aspect, is studied; every phase of the varying processes of life is investigated by means of the auxiliaries which natural science has placed at our disposal. Concentrating into one focus the results which are obtained from these various modes of investigation, the object of true clinical medicine is to reconcile and perfect the one-sided views resulting from division of labor. As to treatment, the more careful tracing of the progress of morbid processes, and the insight into their modes of origin and retrogression, enable us to determine the principles of treatment with greater clearness than formerly! A more accurate diagnosis secures to us the homogenous nature of the quantities that we have to deal with."

Thus, though we have not as yet a rational system of medicine, we have important data for the formation of such a system. This volume contains the historical account of diseases of the liver, the definition of the dimensions and weight of the organ, physical diagnosis, the chapters on icterus, acholia, acute and chronic atrophy, the fatty liver, the pigment liver.

In explaining certain forms of jaundice not accompanied by any obstruction of the bile ducts, as in pyæmia, typhus, the author supposes that there is an arrest of the consumption of the biliary acids, which have been re-absorbed into the blood, either from the intestines or directly from the liver. It is rendered probable that even in a state of health all the bile formed in the liver does not pass into the bile ducts, but that a portion of it enters the hepatic veins along with the sugar, the quantity thus entering varying with the distribution of the blood in the gland and with the relative degrees of pressure exerted by the contents of the veins and of the minute bile ducts upon the secreting cells, being the largest when the pressure on the sides of the veins is least, and when that on the side of the ducts is greatest. The biliary acids which thus enter the blood, or which are re-absorbed from the intestine, are supposed to undergo certain changes from oxidation, and may thus account for the large quantity of tannin which has been found in the healthy lung, and for the pigments that are naturally voided with the urine.

When anything interferes with these normal metamorphoses in the blood, as when the fluid becomes contaminated by purulent infection, or by any other poison, it is supposed that the complete metamorphosis of the colorless bile into urinary pigments is arrested, and that the immediate substance, bile pigment, is formed in the blood so as to color the various tissues and secretions. The arrested metamorphosis of the biliary acids under such circumstances is thought to be analagous to the arrested metamorphosis of the sugar formed in the liver, which leads to diabetes. These views have been widely discussed, and on the whole have maintained their ground. We have not space further to allude to the other topics here discussed. Thirty carefully observed cases are interspersed to illustrate the views advanced. Plates and tables are made to contribute greatly to the value of the work. We have been intensely interested in every page, and doubt not that such physicians as have not read the work already will find it equally useful and entertaining. Its mechanical execution is in harmony with Wood's library of standard medical authors.

General Surgery—Bryant.*

Nearly seven years since, the first American edition of this work was given to the profession. At that time we wrote, "the author gives us his own beliefs, his own practice, and illustrates by his own cases, or those treated in Guy's Hospital. One feels himself almost by the side of the surgeon, seeing his work, and hearing his living words. The views and practice of other surgeons are calmly and fairly considered, but Mr. Bryant's are adopted. Thus the work is not a compilation of other writings; it is not an encyclopœdia, but the plain statements on practical points of a man who has lived in the richest surgical experiences. We might criticise expression, style, etc., but, after all, the writer makes his meaning perfectly clear, and hence such criticisms have only a literary significance, and, in a practical surgery, are of minor importance." The evident and continued favor with which the profession has accepted this work proves that it was adapted to its needs; that it was helpful. The edition before us is no thicker than the former—it has scarcely as many pages, but they are considerably larger, so that the volume contains much more material. The author has seen fit to introduce chapters on diseases and injuries of the eye and ear. But he has also had the good sense to have them prepared by writers who are more familiar with the subjects than is possible for a general surgeon. Thus the chapters on the eye are by Charles Higgens and those on the ear by Laidlaw Purves. Those on the eye especially are condensed with superior skill and perspecuity. Dental surgery is also represented by chapters from the pen of Mr. Henry Moore. Dr. Moxon contributes an excellent article on the microscopical anatomy of tumors. Nearly a hundred new cuts are added to the work. In a sense far more extended than is usual, the old edition has been largely recast. True, the same mold has been employed, but the elements composing the materials have been modified so as to very adequately represent the present aspect of surgery. As expressing a truth vital in both medical and surgical study, and illustrating the author's stand-point, we quote the following: "In surgery, as in medicine, the student must educate the eye to see and the hand to feel. The task is by no means simple or easy; indeed, it is one of the most difficult to learn, and cannot be begun too early in a professional career. Reading will not help, nor thought aid; personal experience at the bedside alone will supply the want. To recognize the existence of a wound or the deformity of a broken bone may not be difficult, but to read aright the endless phenomena which a wound presents, and to make out the character or tendency of a fracture, requires much experience. To see that a swelling exists in a part is open to the uneducated eye; but to recognize the various aspects that different tumors assume, to make out their form, position and attachments, to estimate their consistence, to recognize the fluctuation of fluid, whether superficial or deep, and to detect pulsation, requires considerable tactile power and long education. No study of the written observations of others could enable any one to appreciate those endless varieties of the pulse which entirely baffle description, or to distinguish between the warmth of the skin excited by various accidental causes and the pungent heats accompanying the first stage of pneumonia, or acquaint him with the shrunk and shriveled features derived from the long-continued disease of the abdominal viscera; the white and bloated countenance often attendant on changes in the functions or structure of the kidney; the squalid and mottled complexion of the cachexia dependent upon the united effects of mercury and syphilis; the pallid face of hæmorrhage; the waxen hue of amenorrhœa; the dingy whiteness of malignant disease; the vacant lassitude of fever; the purple cheek of pneumonia; the bright flush of phthisis; the contracted features and corrugated brow of tetanus—all which shades of countenance, with many more that might be enumerated, are distinctly recognized by the experienced eye."

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*A MANUAL FOR THE PRACTICE OF SURGERY. By Thomas Bryant, F. R. C. S. With six hundred and seventy-two illustrations. Second American, from the third revised and enlarged English edition. Sheep; pages 945. Philadelphia: 1879, Henry C. Lee.

Duhring's Atlas of Skin Diseases.*

This fasciculus of this work represents, with special truthfulness, "scabies," "herpes-zoster," "tinea," "sycosis" and "eczema" (vesiculosum). The letter press accompanying the lithographs is as correct and graphic as in former parts. To such as cannot clinically observe these cases these plates will prove of infinite service.

Smith on Diseases of Children.†

This valuable and popular work has been so long before the profession as to need little notice from us. The pains-taking and able author has ransacked the entire field of medical periodicals, medical books, and his own vast experience, for aught of value concerning the diseases of children, and, with excellent taste and superior skill, incorporated them in the text. By using a smaller type, all these alterations and additions have failed to increase the number of pages in the book. Especially noticeable are the changes in therapeutics. For depressing remedies we have substituted those which fulfil the indications, while they sustain or do not reduce the strength. An effort is made to render all medicines more palatable. Thus the work is thoroughly modernized, and admirably adapted to the needs of both students and practitioners.

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*ATLAS OF SKIN DISEASES. By Louis A. Duhring, M. D. Part V. 1879: J. B. Lippincott & Co. Price, $2.50 per part.

†A TREATISE ON THE DISEASES OF INFANCY AND CHILDHOOD. By Dr. J. Lewis Smith. Fourth Edition. Pages 557. Philadelphia: Henry C. Lea; 1879. Sheep, $6.00; cloth, $5 00.

General Surgery—Ashhurst.*

For seven years this work has been before the profession. That a second edition is now called for proves that many have desired it. The general character of the work is unchanged. The enlargement and revision have simply adapted it to the needs of the modern student. In succession we find chapters on dressing, inflammation, operations in general, anæsthetics, minor surgery, amputations, effects of injuries and wounds in general, gunshot wounds, injuries to blood vessels, nerves, muscles, tendons, lymphatics, bursæ, bones and joints, fractures, dislocations, effects of heat and cold, injuries to head, back, face, neck, chest, abdomen and pelvis; diseases resulting from inflammation, erysipelas, pyæmia, diathetic diseases, venereal diseases, tumors, surgical diseases of the skin, areolar tissues, lymphatics, muscles, tendons and bursæ, nervous, vascular and bony systems and joints, excisions, orthopædic surgery, diseases of head and spine, eye, ear, face, neck, mouth, jaws, throat, breast, intestinal canal, abdominal organs, urinary calculus, diseases of the bladder and prostate, urethra, and male and female generative organs. Five hundred and forty-five illustrations serve to render the text clearer. Necessarily condensed, the style is yet very readable The medical student will have no difficulty in grasping the meaning of the author. It is impossible to condense all surgery within such a compass, but our author has met with more than average success. Surgical practitioners or teachers might have desired more of originality in the matter, but they must look for this in larger works, or in monographs on particular topics. The mechanical execution of the work accords with the well-known reputation of Henry C. Lea's publishing house.

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*The Principles and Practice of Surgery. By John Ashhurst, Jr., M. D. Second edition. Enlarged and thoroughly revised, with 542 illustrations. 1878. Philadelphia: Henry C. Lea. Sheep; pages, 1040.

Toland's Surgery.*

The first edition of this work was issued September, 1877. The speedy call for a second edition has prevented the author from revising the text. He has added one lecture and two cases of aneurism. Thus it will appear that the excellencies and defects of the first edition are reproduced unaltered. Of these we spoke quite freely in our first notice of the volume, and have little to add now. Doubtless all surgeons will find some interest and profit in the study of the reported cases, but the medical student who trusts in it as a basis for his knowledge of modern surgery will be grievously disappointed. For the credit of American surgery we could have wished that the author had never been in "labor with his book." The publishers have issued it in excellent taste.

Fox's Epitome of Skin Diseases.†

The first edition of this work was so favorably received that the authors have re-written it two-thirds and enlarged it about three times. The section on the Pathology of the Skin is especially valuable in the concise account it presents of all important changes occurring in the dermal textures in disease. The entire book is prepared by one who was ever looking at the practical side of dermatology, to the exclusion of merely hypothetical matters. The work is divided into three parts. Part first treats of "General Observations on Skin Diseases;" part second of the "Description and Treatment of Skin Diseases," and part third of "Cutaneous Pharmacopœia." In the article on ætiology, we see no mention made of Dr. D. M. Yandell's discovery that most skin diseases are the result of malarial poisoning. The views that have long prevailed are stated very briefly and well. Most practitioners will be pleased with the cutaneous pharmacopœia, as affording them specific directions in the preparation of prescriptions for the several cutaneous affections. These are the more desirable, as in the practice of most physicians skin diseases are relatively rare. The classification of the American Dermatological Association is inserted by the American editor.

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* LECTURES ON PRACTICAL SURGERY. By H. H. Toland, M. D. Second edition: Illustrated. Pages, 560. 1879. Philadelphia: Lindsay & Blakiston. Price, $4.50 cloth; $5.00 sheep. For sale by Arnold & Willyoung.

† EPITOME OF SKIN DISEASES, with Formulæ for Students and Practitioners. By Tilbury Fox, M. D., and T. C. Fox, M. D. Second American edition, enlarged and revised by the authors. Pages, 216. 1879. Henry C. Lea, Philadelphia. Price, $1.00.

Abstracts from Exchanges.

PREPARED BY JUDSON BRADLEY, M. D., ALBERT B. LYONS, M. D.,
E. A. CHAPOTON, M. D.

Practical Medicine.

TREATMENT OF CHRONIC ALBUMINURIA WITH ANASARCA BY FUCHSINE OR MURIATE OF ROSANILINE.—(*Lyon Medical*, February 23, 1879). M. Bouchut has published an interesting paper, under the above title, in the *Gazette des Hôpitaux*. The following are his conclusions:

Ten detailed observations, seven of which are personal to the author, of cases of albuminuria cured by fuchsine are upon record. In all the cases the albumen was very rapidly diminished, both in quantity and quality, and finally disappeared after a longer or shorter time. The patients were under treatment from one to six months, and the dose of the remedy varied from 10 to 25 centigrammes per day. Milk diets and white meats was the fare during treatment. Diaphoresis was likewise daily made use of in the case of several patients by enveloping
in warm woollen covers impregnated with vapors of ben

During the entire treatment the urine was of a more or less pronounced pink color, due to the passage of the remedy into the blood and through the kidneys. The tongue and the lips were dyed very red. The appetite was not deranged; there was neither gastralgia, colic nor diarrhœa. Emesis occurred but once and then lasted for twenty-four hours, but the next day fuchsine was again administered without any further trouble arising.

From these facts it appears that the danger of poisoning from partaking of wine to which fuchsine has been added is but a minimum one and by no means commensurate with the excitement to which the discovery of that falsification gave rise. No such quantity of fuchsine indeed would ever be added to a full barrel of wine as M. Bouchut gave to one patient, for even children took from 12 to 15 grammes in a few weeks.

The author's conclusions are the same whether or no the fuchsine contains arsenic, as the quantity of the latter substance in proportion to the remedy is so very small that it can do no harm.

TREATMENT OF OBSTINATE SCIATICA BY SUBCUTANEOUS INJECTIONS OF NITRATE OF SILVER.—(*Med. Record*, *N. O. Med. & Surg. Jour.*, March, 1879.) Dr. Dureau has collated the cases of obstinate sciatica treated in the Parisian hospitals by Damaschine and Guerin-Rose on Luton's plan, and has deduced from them the following conclusions:

1. Subcutaneous injections of nitrate of silver are to be recommended in cases of inveterate sciatica.

2. These injections, though irritating to the tissues, may be undertaken without any fear of evil consequences.

3. The method renders it possible to reach the diseased spot and to insure the action of the remedy.

4. Improvement and recovery take place rapidly under this treatment.

5. The subcutaneous injections of lunar caustic are more active and less dangerous than the actual cutting which is so [illegible] recommended for sciatica.

Luton employed a ten per cent. solution of the nitrate of silver and injected from twenty to twenty-four drops, but Guerin-Rose uses a fifteen per cent. solution and injects fifteen drops, and Damaschine takes one of only four per cent. and injects only five drops. Of twelve cases treated by Guerin-Rose, most were cured, a few were improved, and a few were not affected at all. No unfavorable consequences were observed in any of the cases. Dr. Dureau advises that the needle be introduced deeply, so as almost to reach the nerve.

TREATMENT OF GASTRIC CATARRH.—(*Allgemeine Med. Central-Zeitung —Lyon Medical,* Feb. 16, 1879.) — Dr. Kuster has experimented for many years with the various treatments recommended for this affection; he rejects almost absolutely the use of the stomach pump. Among the various preparations usually employed he retains but three—hydrochloric acid, Carlsbad salts and nitrate of silver. He gives the acid in five to eight drop doses, in a glass of water, before and after meals; the Carlsbad salts by one or two dessert spoonsful daily in a little warm water; the nitrate of silver in pills, each containing .005 of nitrate and .007 of extract of belladonna. The following are the indications: where the secretion of gastric juice is deficient; when the patient not only complains of loss of appetite but also of pain and weight, particularly after the use of meat, but says nothing of flatulence nor acid eructations, hydrochloric acid is indicated. These symptoms are produced by insufficiency of gastric juice, and are frequently found among smokers. Carlsbad salt is employed in just the opposite class of cases, in which it is useful by neutralizing the excessive acidity of the gastric juice and checking the secretion of gastric mucus.

Although nitrate of silver has been administered in simple ulcer of the stomach, Kuster believes it to be dangerous practice. He gives it in every case in which the other two have failed—where probably no ulcer exists. He has found it to be of particular benefit in women presenting some tendency to chlorosis, and having a nervous and irritable temperament.

TYPHOID FEVER AND PERIOSTITIS.—*(Mercur. Lyon Medical,* Feb. 9, 1879.) Inflammations of the periosteum, in connection with typhoid fever, have been studied but little up to this time. As all other organs are affected by this disease, why should not the bones and their coverings be influenced in a similar manner? Although no cases had been observed, still the possibility of the development of periostitis in individuals debilitated by typhoid fever has been mentioned by all authors who have written upon the diseases of the periosteum.

Mercier saw this complication arise in seven cases. It is during convalescence, that is, after five or six weeks of sickness, when fever has disappeared and the patient commences to sit up, that periostitis shows itself. The most striking symptom is the absence of repair of the body, although the patient has a good appetite and the digestive functions seem in good condition. Increasing weakness is the great complaint. Even then, one of the limbs becomes heavy, numbed, and even impotent; the leg can hardly sustain the weight of the body, or else the movements of the arm and shoulder are limited. Tumefaction of the periosteum now exists, and some exceedingly painful spot may be discovered. After four to eight days the acute pain spreads over a larger space, and although the skin remains normal, the subcutaneous cellular tissue becomes œdematous and the periosteum thickened and exquisitely painful. The tumefaction of the cellular tissue continues from four to five days and then the symptoms remit. The pus formed is evacuated or absorbed and the pains cease, but the periosteum remains thickened for at least a year.

Mercier never saw a case terminate in necrosis, although Keen, of Philadelphia, records such an event. The patient commences to grow stronger only when this periostitis has completed its evolution and the pus formed has been evacuated or absorbed. The ætiology of this complication is obscure, as it appears to commence spontaneously, or some severe traumatism fixes the point of the body upon which it will develop. The application of a blister as soon as any tumefaction whatever is observed gives the best results in the way of treatment. If pus has formed the abscess should not be opened with the bistoury, as acute septicæmia may arise; it is better to wait for its absorption or spontaneous evacuation.

Nervous Diseases.

NEURASTHENIA—ITS PRINCIPAL PHENOMENA.—Dr. J. S. Jewel (*Journal of Nervous Diseases*, January, 1879,) sums these up as follows: (1) Exalted physiological sensibility, general and special, including reflex excitability. (2) Permanent lack of nervous power, including power of inhibition. (3) Beneath all this, impaired nutrition, in which there is a more or less permanent preponderance of waste over repair, especially in the nervous structures of the body. (4) Exalted emotional susceptibility and mobility, especially in the direction of depression. (5) Loss of will power, or power of control, and in general not of mental *sensibility*, but of mental *power* to do or endure within the sphere of mental life and action. (5) Underlying all of which are combined nutritional and circulatory lesions, especially of the brain, which impair the substance, diminish and render unsteady the exercise of the power of the brain, and finally exalting its sensibility.

WRITER'S CRAMP—STUDY OF ONE HUNDRED AND TWENTY-FIVE CASES.—Dr. George M. Beard (*Medical Record*, March 15, 1879,) gives us the results of an extended study of writers' cramp: (1) What is called writers' cramp is but one of a large number of symptoms of the disease, and no two cases are precisely alike. Among these are fatigue, exhaustion, dull, aching pain, nervous, irritable feeling, general nervousness, trembling, unsteadiness, cramp, spasm, jumping, twitching, rigidity, contraction of muscles, etc. (2) In other forms of professional cramp, as that of telegraphers, musicians, sewing women, painters, artists, dancers, hammer-palsy and so forth, the cramp is but one of a number of symptoms, and by no means the most important one. As in the writers' cramp, there is frequently no cramp at all from the beginning to the end of the disease. (3) This disease is primarily a peripheral and local disease of the nerves and muscles; secondarily and rarely it becomes central and general, or it may result from various central lesions; and it may affect any point between the extreme periphery and the centre. (4) This disease occurs mostly in those who are strong, frequently of very strong constitutions, and is quite rare in the nervous and delicate, and when it does occur in those who are nervous, is easier relieved and cured than when it occurs in the strong. (5) This disease is far less likely to occur in those who do original work, as authors, journalists, composers, than in those who do routine work, as clerks, book-keepers, copyists, agents, and so forth. (6) This disease, like all nervous diseases in this country, diminishes in frequency as we go south. (7) Writers' cramp is no longer an incurable disease. (8) The treatment of writers' cramp and affections allied to it consists (a) In the use of electricity locally applied. (b) Hypodermic injections of atropia, strychnia, duboisia, Fowler's solution, and other tonics, narcotics and sedatives. (c) The internal use of calabar bean, ergotine, iodoform, and, in some cases, of nerve food, as oil and fats. (d) Massage. (e) The alternate use of hot and cold rubber bags. (f) The use of the actual cautery and very small blisters to the upper portion of the spine, or along the course of the affected nerves and muscles.

TETANOID PARAPLEGIA.—This disease is otherwise known as spastische spinalparalyze, Erb, and Tabes dorsal spasmodique, Charcot. Dr. Seguin (*Archives Medicine*, January, 1879,) very fully reviews all the facts thus far developed, with conclusions as follows: (1) There is possibly a *disease* worthy of being called primary sclerosis of the lateral columns, and characterized by tetanoid paraplegia, without anæsthesia, ataxia, atrophy, or affections of the bladder. (2) There is very certainly a tetanoid paraplegia indirectly produced by various lesions of the spinal cord as pressure effects, syphilitic and non-syphilitic myelitis in the dorsal region, amyotrophic lateral sclerosis, traumatic myelitis, disseminated nodular sclerosis. (3) It is probable that a functional tetanoid paraplegia exists in children, caused by genital or other peripheral irritation. (4) It is possible that tetanoid paraplegia cervicalis in young children may be due to defective cerebral development, and consequent agenesis of certain tracts in the cord. Pathological anatomy tells us that : (1) In the true spastic paralysis, Charcot and Erb claim that there is primary sclerosis of the lateral columns of the cord. The opinion is based upon five rather unsatisfactory cases. (2) In the case which Charcot and Betons took for spastic paralysis, the autopsy revealed disseminated sclerosis, numerous nodules being found in the lateral columns. (3) In the late contracture of hemiplegia, which produces symptoms so much resembling tetanoid paraplegia, we now know beyond question that there is degeneration of the posterior part of the lateral column—the crossed pyramidal column of Flechsig. (4) In the various diseases of the spinal cord which, in the experience of many observers, have been accompanied or followed by a tetanoid state, we have good reason to believe that there was a secondary descending degeneration of the crossed pyramidal column.

Thus it appears almost certain that lesions of the crossed pyramidal columns have much to do with the development of tetanoid paraplegia, though we as yet lack a demonstration of the existence of a *primary* sclerosis of these parts.

Action of Medicines.

SKIN IRRITATION—ITS VARIOUS FORMS PRODUCED BY THE ADMINISTRATION OF DRUGS.—Dr. Robert Farquharson (*British Medical Journal*, February 22, 1879,) presents an interesting summary of the effects on the skin of the administration of certain drugs. Arsenic in medicinal doses has been observed to produce herpes, and in larger doses an eczematous eruption. Phosphorus sometimes produces purpura. Iodide of potassium sometimes produces papules, which quickly become pustular. These may develop into ecthyma or bullæ. Bromide of potassium more frequently produces an acne. Nitrate of silver produces an indelible, dull, leaden color. Mercury brings out an eczematous eruption of the skin. Chloral hydrate causes an erythema, scarlet-fever-like eruption, hæmorrhagic purpura. Aconite is occasionally attended by an irritable vesicular eruption. Copaiba often produces a sort of urtica. Quinine occasionally causes two kinds of eruptions: The first are erythematous in character, attended by most distressing itching and tingling, resembling scarlet fever both in the appearance of the rash and the free desquamation which follows; the second assumes a more measly aspect, being occasionally papular, but more generally suggestive of urticaria that occurs in discrete rose-red patches, spreading universally over the skin, and occasionally attended with marked gastric disturbance. Strychnia has produced a rash resembling that from quinine. Belladonna may produce a bright red rash, very like scarlet fever. Cod liver oil occasionally causes acne. Salicylic acid has produced a peculiar, bright punctate rash with erythematous patches, eventually surmounted by vesicles, with sore throat and constitutional disturbance resembling scarlet fever.

Pathology.

VALVULAR DISEASE OF THE HEART—EXPERIMENTAL PATHOLOGY.—Dr. Ottomer Rosenbach *(Archiv. für Exp. Pathologie, Lond. Lancet)* details some experimental researches upon the symptoms and effects of valvular diseases. He first sought to answer the inquiry, "What influence on blood pressure has the destruction of one or more valves?" The observations were made upon dogs and rabbits, the blood pressure being measured in the crural or carotid artery. The aortic valves were injured by a sound introduced into the right carotid artery, the injury to the valves being immediately manifest by the effect on the sounds of the heart and upon the pulse. The mitral and tricuspid valves were damaged by Kleb's valvulotome. The destruction of one or more valves does not vary the blood pressure, as the reserve force of the heart is called into action to compensate for the disabled valve. Experiments show that this reserve maintains the pressure, even in the face of grave valvular damage for many weeks—until hypertrophy is developed. Further, it was shown that in all cases the first structural change was dilatation, and that the hypertrophy was secondary in time to the dilatation, but never sufficient to effect a perfect structural compensation, although dynamically the compensation was complete. Very constantly there was developed an aneurismal dilation of the apex of the heart and a fibrous degeneration of mitral papillary muscle. An other inquiry was, "When and under what circumstances is endo-carditis produced, and what are the consequences thereof?" In one group of cases there were no deposits of fibrin near the injury. In another group, there were more or less abundant vegetations of fibrin found at the seats of damage, but no foreign organisms in deposit. Lastly, in two cases there were both deposits on the injured valves containing micrococi and areas in other organs infarcted by emboli. The post mortem appearance was exactly that of ulcerative endocarditis, with the usual consequences. The different results are explained by the variations in the nature of the instruments and the rapidity of the operation. These researches are interesting, as explaining and confirming the results of clinical experience.

Salivary Glands—Their Lesions in Diphtheria.—In 1771, Dr. Samuel Bard, of New York, described a swelling of the parotid and sub-lingual glands in pharyngeal diphtheria. MM. Balzer and Salamon (*Revue Mensuelle*, *London Lancet*, Jan., '79) have, by pathological research, proved the correctness of Bard's statement. They found, in slighter cases, the glandular epithelium swollen and filled with homogenous translucent mucoid material. Oftener the acini were diminished in size, and their cells small and granular. In other parts the acini are filled with small, round cells, the glandular structure almost disappearing. There is a similar infiltration of the connective tissue within the lobules and acini, but less change in the perilobular and periglandular tissue. The lymphatics within the gland are stuffed with round cells, and often form small abscesses around the lobular ducts. Then they hold that there are three factors in the production of the swelling of the neck in diphtheria: (1) lymphadenitis, leading to the painful, small, hard tumors behind the angle of the jaw and along the sterno-mastoid; (2) inflammation of the salivary glands, producing the uniform, smooth, elongated swelling beneath the lower border of the jaw, and that which fills up the hollow immediately behind the ramus; (3) the general swelling of the hyoidean region, due to inflammatory œdema of the cellular tissue.

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Original Communications.

CHLORIC ACID.

BY D. W. C. WADE, M. D., HOLLY, MICHIGAN.

In these days, we may assume that it is conceded that the therapeutical action of easily decomposed salts, administered by way of the stomach, is referable either to the base or the acid, but not to the two as chemically combined, except the amount exceed the decomposing power of the gastric acid while in contact with the salt. I believe it now to be determined that the only acid of the stomach not accidental, is hydrochloric. This acid is capable of decomposing many of the most valuable and frequently prescribed salts. It is known that without decomposition, the action of most of the salts used in medicine would not be in accordance with the object sought to be attained. To illustrate: Carbonates of the alkalies are usually administered on account of the base and not for the carbonic acid. If this acid had as strong affinities as sulphuric acid has, the object would be subverted. Iodide of potassium, bromide of potassium, sulphide of lime, phosphide of zinc, the hypophosphites and many other salts, are not generally given with any reference to the base, and had these halogens and acids as strong affinities as has sulphuric acid, the object of their administration would not be accomplished. Again, the action of sulphate of magnesium is like neither the base nor the acid, because it is not decomposed within the system. Neftel says that in fevers the stomach contains no acid, and his assertion is probably true. Such a condition gives rise to many of the symptoms, and may account for many otherwise inexplainable failures in obtaining the effect of remedial measures. Thus, medicines not soluble in water or in alkaline solutions, administered without previous solution during an elevation of temperature, are often worse than wasted. The administration of sulphate of quinia, which is but slightly soluble in water, not mixed with an acid either in or out of the stomach, would but result in disappointment. I wish, therefore, to call the attention of the profession to the frequent desirability of prescribing important therapeutic agents in the form in which we expect the stomach to present them to the circulation, instead of depending upon that capricious organ as a chemical manipulator. Among the salts that are always decomposed in the presence of hydrochloric acid, is chlorate of potassium, and it is probable that the usefulness of this salt as a systemic remedy, and perhaps locally, depends alone upon its acid uncombined. It is to this acid that I invite especial attention. Chloric acid contains one part (equivalent)of chlorine and five parts of oxygen —$Cl.O_5$ (o. s.). It is itself easily decomposed, and is a powerful oxidizing agent, and, as might be supposed, is an active antiseptic. The uses of chlorate of potassium have been founded partly upon rational and partly upon empirical grounds. I shall not here attempt to discuss the *rationale* of the action of chloric acid, but shall simply in the main advise its use under many circumstances in the place of chlorate of potassium. It is preferable when for any reason we may suppose the stomach is incompetent to prepare the acid from the salt. Chlorate of potassium is only soluble in 16 parts of water, each drachm of its aqueous solution, therefore, containing 3¾ grains. The acid can be made more concentrated, and for this reason may be more desirable. The acid is a powerful solvent of the alkaloids and their salts, and has, therefore, convenient combining qualities. Most septicides are acids, and it is probable that the septicidal action of chlorate of potassium resides in its chloric acid and its feeble affinity for the base; hence, the logically greater dependence to be placed upon the acid than its salt in septic affections. It appears to be now a generally accepted opinion that diphtheria is a fermentation disease—at first local and then constitutional by absorption. Excellent authorities now claim that, to stay the local action by non-irritating septicides before absorption is possible, invariably ends the affection. It seems likely that the immense reputation of chlorate of potassium in diphtheria has depended upon its power to destroy microscopic life. Chloric acid, in my hands, has proved equally efficient in this disease. The taste of this acid with syrup is much more grateful than when combined with an alkaline base.

Chloric acid may be used to obtain effects for which chlorate of potassium is inert, or comparatively so—as a tonic to aid digestion, a febrifuge in fevers and to overcome the condition called "biliousness." But, equaling all else, the use of chloric acid is in accordance with the exactness of modern methods, and the results that are thus so much more likely to be invariable. The time is near at hand when only the unscientific will administer to human beings that which is to be the least depended upon. It should only remain for us to discover how we may avoid error, and there is none greater than to depend upon the stomach as a pharmaceutical laboratory.

I have devised the following formula for the convenient production of chloric acid. The product is not chemically pure, on account of the slight solubility of the by-product bi-tartrate of potassium (cream of tartar), which, according to the United States Dispensatory, is 1 part in 180 of water. This on no account can be urged as objectionable. It is to be hoped that the strength of this acid will not be arbitrarily changed by other experimenters, on account of the confusion that results from variable strengths of non-officinal preparations. It would be proper to denominate acids of the strength here given as dilute, in contradistinction to concentrated:

I.	Chlorate of potassium, . . .	360 grains,
	Tartaric acid.	440 grains,
	Water, ...	3 fluid ounces

Or,

II.	The salt, ...	9 troy ounces,
	The acid, ...	11 troy ounces,
	Water, ...	36 fluid ounces.

Or,

III.	The salt,	9 avoir. ounces,
	The acid,	11 avoir. ounces,
	Water,	33 fluid ounces.

Or,

IV.	The salt,	288 grammes,
	The acid,	352 grammes,
	Water,	1080 c. c.

Dissolve the salt in two-thirds of the water by the aid of heat. Before cooling, add the acid, previously dissolved in one-third of the water. After cooling and completion of the precipitation, decant. Each fluid drachm of the finished product contains the acid of about 15 grains of chlorate of potassium. It is a heavy fluid, and presents the general appearance, taste and smell common to the dilute mineral acids. I have prescribed several gallons in doses for adults of one-fourth to one fluid drachm, largely diluted, apparently without inconvenience.

V.	Dilute chloric acid,	Quantities according to age of patients.
	Muriated tincture of iron,	
	Syrup (flavored),	

Mix, and write: Teaspoonful in water every two hours. (For diphtheria.)

VI.	Dilute chloric acid,	2 fluid ounces,
	Fluid ext. of rhubarb,	1 fluid drachm,
	Fluid ext. of gentian,	1 fluid ounce.

Syr. to make 4 fluid ounces.

Mix, and write: Teaspoonful in water before meals. (Atonic dyspepsia.)

It is not necessary for me to extend the combination formulas. A great variety will doubtless be readily suggested to the prescriber.

I apprehend that there is a wide field open for investigation as to the therapeutic application of chloric acid; among other things, as to its power as an oxidizing agent within the circulation. I do not doubt that the profession will be glad to hear the result of others' experience in its use.

I am not aware that others have produced chloric acid by the formula I have given, have ever prescribed it as a medicine, or that it has ever before appeared as a subject of medical literature.

May 16, 1879.

Precautions Requisite in the Administration of Ergot.

BY J. W. COMPTON, M. D.,

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The skilled therapeutist, in the administration of active remedies for the relief or cure of disease, looks for the characteristic physiological action of each remedy to be manifest, with as much certainty as the chemist in his analysis expects his re-agents to act upon the certain other bodies he is searching for.

In selecting his re-agents there are two requisites the chemist will insist upon, that they be pure and of full strength; the physician, in selecting his remedies, should be content with nothing less. These necessary precautions in selecting medicines pure and of full strength apply, perhaps, with quite as much force to ergot as to any other article of our materia medica. The prompt and certain action of ergot is sometimes urgently demanded in cases of profuse and dangerous uterine hemorrhage, when to administer an article of the drug, the strength of which has been impaired by age, heat or improper chemical manipulation, might result in the death of the patient. The greatest care should be exercised by the physician to the end, that the edge of this important weapon in his armamentarium be not dulled.

There can be no reasonable doubt that the power to originate and intensify uterine contractions, which clinical experience has so fully accorded to this remedy, resides, in an eminent degree, in the fresh and well-preserved drug, and, when practicable, this form of administration should be relied on, as it will uniformly respond to the demands made upon it. If, however, the fresh grain cannot be obtained, a reliable article of the preparations should be procured. Any preparation containing the full strength of the remedy should and will produce the characteristic physiological action of the remedy, and all the uncertainty in the action of ergot which has been recorded has arisen out of the use of inferior preparations or impaired stock of the substance. Failures to obtain the expulsive contractions, when a pure article is used, originate principally from the administration of the remedy at improper times, less often from improper doses.

It is well known that midwives and some doctors give the remedy to intensify the pains and hasten labor, regardless of any indications or contra-indications for its use; they make no examination, and some of them who make the most liberal use of the remedy would not know any more about the case if they did examine. All they know is that the child is not born, and they desire to hasten the process. An intelligent physician, who is better informed now, has just told me that when he was a young practitioner he was called quite a distance to see a farmer's wife and attend her in her third confinement. He reached her bedside near nightfall and learned that his patient had been in rather active labor for twelve hours; but, as not much progress appeared to have been made, without any examination (something he would not do now), he gave a full dose of ergot, waited an hour, when he found the force of the pains had greatly subsided. He administered another dose, waited another hour, and found his patient entirely easy and taking a much-needed rest in quiet sleep. The doctor retired for the night with instructions for him to be called when the pains became sufficiently forcible to require his assistance. He slept all night, and so did his patient. After eating a good breakfast, his patient feeling quite well, the doctor returned home, and six weeks after that time his patient had an easy and natural delivery. If this were a rare case it would not be worth narrating here, but such cases are of frequent occurrence, and from them we may learn an important lesson, that ergot, under certain conditions, becomes a sedative instead of a parturifacient. Dr. W. R. Putney says "that he has observed that ergot, in fifteen-drop doses every four hours will relieve pain in the back and bowels, uncomplicated with hemorrhage in the pregnant, when threatened with abortion. It surpasses opium in its sedative effect upon the pelvic organs; it subdues the hyperæmia of these parts, thus quieting the disturbances." By its known physiological action in contracting the circular muscular fibres in the blood vessels, it will be found to be more strongly indicated and equally satisfactory when hemorrhage is present. There are several precautions which may be named as contra-indicating the administration of ergot as an expulsive agent, where a complete hindrance to the expulsion of the child may be produced by the very remedy we may unwisely administer to facilitate and shorten the labor. When we take into consideration the conformation of the uterus and the requirements nature has provided that it should possess, we may readily see how the action of ergot may mechanically retard instead of hasten labor. Nature has designed that the neck of the uterus should be thick and strong, with short resisting fibres to sustain the constant weight of the fœtus during the nine months of utero gestation, and but for this strength and resistance the child could not be carried to full term. If this resistance has not been overcome by the preparations of nature for the final liberation of the child, the muscular fibres creating this resistance are quite as amenable to the contracting power of ergot as any other portions of the uterus, and by this contracting force the muscles of the neck are drawn firmly together below the child, to use a homely but expressive illustration, as the farmer draws the purse strings around his cash, and the child is securely tied up in the uterus and must remain there until relaxation occurs. The ergotic contractions of the uterus are often so persistent that we may have to wait a long time for this relaxation to take place and permit the labor to proceed.

It is proper to state in this connection that in women of relaxed fibre and roomy pelvis, or if there be danger from post partum hemorrhage, and the os uteri be sufficiently dilated to admit of the easy passage of the child, and the child's head be well down upon the perineum and beginning to emerge through the vulva, it is proper to give a decided dose of ergot to prevent hemorrhage. Even then the life of the child may be sacrificed if delivery from some unforseen cause should be delayed beyond a reasonable time. Another objection to the unnecessary use of ergot in ordinary practice is the frequency with which after-pains appear to follow its administration, and continue from twelve to thirty-six hours in spite of opiates. They are often so terribly distressing that the patient, instead of being in that quiet, serene and happy state of tranquility that the trying, indescribable ordeal through which she has just passed entitles her to, is restless, anxious, and suffers pains as intense, and, in some instances, in the aggregate equal to those of parturition.

Prof. H. C. Wood will be accepted as reliable authority for some of the precautions against the improper use of ergot here mentioned. If ergot be given in small doses during labor, the pains are simply intensified. In doses large enough to have a decided effect their character is altered. They become not only more severe, but much more prolonged than normal, and finally the intervals of relaxation appear to be completely abolished, and what had been intermittent expulsive efforts are changed into one violent, continuous strain. If the resistance be sufficiently great, it may endanger the safety of both the mother and the child. The dangers to the mother are threefold; convulsions or congestions of the brain, from the long-continued force of the blood upon the brain; rupture of the uterus, not a very frequent occurrence, but one much to be dreaded, because it is almost necessarily fatal; the third source of danger is to the soft parts. If they be unrelaxed and sufficiently unyielding, there will be rupture of the perineum. The improper use of ergot is far more serious in its effects on the child than upon the mother. Living a dependent life in utero, and yet subject to the same laws in regard to its needed supply of oxygen that characterizes its independent life after birth, whatever deprives it of blood freshly aerated by the mother's lungs and supplied through the placental circulation, destroys the child in the womb as certainly as closing the air passages by strangulation would cause its death from asphyxia after its existence became dependant upon the external air.

During a violent uterine contraction the passage of the blood from the placenta to the child must be interfered with, or, in other words, the supply of oxygen to the fœtus is temporarily suspended, so that its life depends upon the aeration of the blood during the intervals between the pains. If the intervals be much shortened, the life of the child is greatly imperiled, and if they be abolished it must be destroyed unless delivery occurs in a very short time. If we consult the older masters in midwifery we shall find that the medicine was then recommended at improper times and resulted in the death of multitudes of children, the larger proportion being still-born, but a considerable proportion were lost by convulsions a few hours after delivery, and their deaths traceable to their having imbibed the poison of the ergot while in utero, and its baneful influence continuing upon their organization even after they had ceased to be subject to its immediate operation. Dr. Ramsbotham says, in speaking of inducing premature labor, that "ergot does exert in some instances a prejudicial influence over the fœtus in utero ; for of the fifty-five children born after the administration of the medicine, though thirty-three were born alive, five died in convulsions speedily after birth." As evidence that he recommended its use for the expulsive powers it possesses, it is only necessary to call attention to a table in which this author sums up the difference in the time which elapsed between the puncturing of the membrane and the expulsion of the child in those cases where the medicine was administered, and in the cases where not given, as follows : In 36 cases where the medicine was not administered the average was 74 hours, while in the 55 cases where the medicine was administered the average amounted to only 26 hours. When we take into consideration his report of 55 cases where the medicine was administered, in which 22 were born dead and 5 died of convulsions speedily after birth, it would appear to be an innocent means of child murder.

After detailing the above statistics, he comes to the following conclusions, which he volunteers in the way of advice: "When the ergot is used, presuming that it exerts and renders manifest its specific influence over the uterus, it would appear to be the best practice not to persist with the medicine until the time when the child is on the point of being born, but rather to give only (?) eight or ten doses, and to desist from its use when the os uteri has acquired the diameter of half-a-crown or a crown piece, then rupture the membranes." "By acting in this way, prolonged compression on the funis and the placenta will be prevented, while at the same time the quantity of the medicine taken by the mother will not have been sufficient to occasion any injury to the child's health in the generality of cases."

In our own country, Dr. Meigs delivers some very significant words of warning when he says: "A labor is effected by the contraction of the muscular fibres of the womb, aided by the abdominal muscles. If all the powers employed in a labor could be accumulated in one single pain, lasting as long as all the pains do, no woman probably could escape with life from so great an agony, except that small number who are met with whose organs, happily for them, make no resistance, but open spontaneously, like a door, to let the fœtus pass out. By a beneficent law of the economy, the pains of labor are short, not lasting more than thirty or forty seconds in general, and returning once in three or six minutes.

"Under such pains or contractions, however powerful, the fœtus is safe; for, as soon as the contraction is over, it lies in the womb, free from pressure, and the placenta, which during the contraction had been violently compressed betwixt the womb on which it lies and the child within the cavity, that placenta, I say, recovers its circulation and continues during the absence of the pain to perform all the bronchial offices that belong to it. But if an ergotic pain is produced to last thirty minutes, in a case where the placenta is on the fundus uteri, and to be jammed for thirty minutes against the child's breach, without an instant of relaxation, who can doubt that the circulation is either wholly or nearly abolished, and that when the child emerges at last from the mother's womb it will emerge quite dead, or in a profound asphyxia, from the long suspension of its placental circulation.

"Multitudes of children are born dead from this very cause, by the imprudent exhibition of a medicine which as certainly excites spasms of the womb as nux vomica does that of other muscles of the body."

In the March number (1879) of the Detroit LANCET I contributed a paper on "The therapeutic value of ergot," in which was enumerated a number of diseases in which practitioners, reasoning from its physiological action, had discovered that it was indicated as a valuable therapeutic agent. Prominent among these were hemorrhage from the uterus, lungs, stomach, nose, bowels, bladder, in a word, all classes of passive hemorrhage; purpura hemorrhagica, varicose veins, hemorrhoids, the vomiting of pregnancy, tumors of the uterus, metretis, leucorrhœa, profuse menstruation, incontinence of urine, vesical paralysis, pneumonia, gonorrhœa, gleet, diarrhœa, dysentery, cardiac debility, congestions of the brain and spinal cord, typhoid fever, yellow fever, and inertia of the uterus, in which it is an indispensable remedy for increasing both the force and frequency of the contractions and the expulsive power of the uterus in parturition. So valuable and potent a remedy as ergot, indicated in the treatment of so wide a range of diverse diseases, like many other good remedies, must necessarily have some contra indications for its use — there would be some conditions in which its administration would work injury instead of good. To have included these in the former article would have extended that paper beyond proper limits, so this became a necessary sequel, to point out the precautions requisite to the safe administration of ergot.

Is "Blood-Letting" a Relic of the Past?

BY DR. J. BROWN, MANITOWOC, WIS

Though this is an age pre-eminently progressive—an age of experiment rather than theory—when everything is scrutinized in the light of science, and theories, no matter how plausible, disappear before the magic influence of facts deduced from experiment like dew subjected to the rays of the morning sun, yet there are many of the medical fraternity (to say nothing of the army of quacks; whose favorite systems are based upon a senseless dogma often long since exploded) who seem to ignore the abstraction of blood under any circumstances. Some, doubtless, are led to neglect it under the impression that it is unpopular; others, it may be, through an infinite conceit mistaken for wisdom, which induces them to *act more wisely than their predecessors;* while others, again, preferring ease to hard labor, seldom commit themselves, and never when a sanguinary engagement is likely to ensue. That it has been made a hobby of, as may be done with any other therapeutic agent, and its enthusiastic advocates have become crazy over it and used it for everything, and consequently done mischief, is no reason why it should be discarded altogether. If so, every remedy of the *Materia Medica* of any power and efficacy can be set aside for the same reason; for all are capable, and many of them equally capable of doing harm indiscriminately used. For example, it was the frequent and indiscriminate use of mercury that brought it into disrepute and disgrace; but is mercury, therefore, not useful? In my opinion, there is no one other remedial agent, used discreetly, of greater value in cutting short disease and restoring health in certain conditions, as in syphilis, for example. So, also, of the prompt and well-timed abstraction of blood; and none, perhaps, so often actually saves life. And I opine that the time is not distant when it will be far from being unpopular; for truth, like the pent-up fires of a volcano, will sooner or later burst forth, if not suddenly to shock and convulse the world, it will gradually make itself felt as a reality and opposed to error. Of course its indiscriminate and untimely use will result in much harm, but in those cases where it is plainly indicated, and at the proper time, like a fire engine in a conflagration, it offers the most direct means of obliterating the disturbing, and if let alone, devastating element. The following cases are in point:

Case 1st. L. D., aged 30, large and plethoric, accidentally slipped and fell, his head striking upon the sharp corner of a large door-stone, producing severe fracture of the skull with depression, at a point near the parietal protuberance of the left side. Being immediately summoned, after careful examination with probe and finger, I dressed the wound, elevating the depressed bones as much as possible without violence, and removing any offending spiculæ; and as no bad symptoms manifested themselves, ordered the application of cold water and left for a time. In my absence a severe convulsion occurred, and another physician, who was in the house at the time, was called into the room, but nothing was done till my arrival, when I drew about thirty ounces of blood from the arm. About one hour and a half later the patient had another terrible convulsion, long protracted, and such as can only occur in a strong man, accompanied with labored and very difficult breathing, and clogging of the bronchial tubes with thick mucus. At once I opened a vein in the other arm, and let the blood flow in a full stream till the system was relaxed and there was extreme pallor of the face, and to my surprise, and the great satisfaction of the friends, no other bad symptoms occurred, and the wound healing kindly the patient recovered, notwithstanding he was an inveterate drinker, being intoxicated at the time of the accident.

Case 2d. Was called to see Mrs. G—, aged 21 years, a healthy, strong, vigorous, muscular woman, in confinement with her first child. On examination *per vaginam*, found head presenting—vertex—os uteri dilated only to the extent of a quarter dollar coin; rigid, thick and clumsy, with pains hard rather than strong, and exceedingly tormenting. As there was some objection to bleeding, but little was done through the night except the frequent repetition of small doses of morphine and antimony with no appreciable effect, however, except to produce vomiting. In the morning the pains subsided, but came on again next night with undiminished energy. I was again summoned, and the same or similar measures were continued till the fifth night, the os remaining tense and unyielding, when the parties became willing to accept of any measure, and after two copious venesections the fibres of the os began to relax, the pains at the same time becoming more regular and expulsive, and during the after part of the night she was delivered of a fine, fat boy, alive and kicking.

Case 3d. Was called to see Mrs. F—, married, aged 24 years, of medium size and healthy, in consultation with an old country army surgeon, who had been trying during the preceding twenty hours to reduce an oblique inguinal hernia; and giving it up, sent for me to make the operation, which he believed unavoidable. On inquiring, and finding the patient had not been bled, I suggested this measure, and blood was drawn from the arm till feelings of approaching syncope began to show themselves, when chloroform was administered to full anæsthesia, and in about twenty or thirty minutes, by taxis, in the most favorable position for relaxing the abdominal muscles, the gut was returned to its normal position within the abdomen without operation, amidst the universal rejoicing of friends.

Case 4th. In February, 1869, I was summoned sixteen miles to see Mrs. B—, aged 24 years, naturally a strong, rugged woman, who had been several days sick with acute pneumonia, accompanied with severe congestion of the lungs, the bronchial tubes being heavily loaded with mucus, and respiration exceedingly difficult. Indeed, just previous to my arrival, she was really thought to be dead, and all turned from the bedside with that impression, but it was simply a paroxysm of hysteria with syncope. Immediately upon my arrival, although too late for its best effect, I opened a vein and drew from the arm twenty to twenty-five ounces of blood, the effect of which, by the friends, was considered wonderful and almost miraculous; and after the third visit, with the use of *veratrum viride* and other sedatives, she was discharged convalescent.

Case 5th. Was called, in same winter, to see Mr. K—, who had been chopping cordwood, and returned from his work with a heavy chill and fever, a full and frequent pulse, difficult respiration, cough accompanied with pains in the chest, and great oppression of the lungs. I first removed about one quart of blood from the arm, and ordered *veratrum viride* and other antiphlogistic measures with cathartic. In the morning, what a change! Nothing could be more marked. The symptoms were all modified; and instead of the spectacle the night previous, I found my patient lying comfortable in bed, the respiration easy, pulse soft and less frequent, the cough less and much easier, with expectoration, and that anxious expression of the countenance so characteristic of distress was all gone. It is needless to say that this patient also made a rapid recovery.

Case 6th. Was called, in consultation with an old German physician, to see Mr. L—, a strong, muscular man about 35 years of age, who, about a year previous, had sustained a severe fracture of the skull nearly in the middle of the forehead, with great depression of the bones, by a shingle-block getting loose from a circular saw. Through the influence of another physician who was called in consultation, and opposed both bleeding and the elevation of the depressed portion of bone, saying that "the brain would push it out when it got well," the wound was allowed to heal in this condition. At this time epileptic convulsions had supervened, and the attending physician (the one who was in attendance at the time of the injury) had already bled sparingly, and was giving small doses of calomel every four hours, with no appreciable effect. I advised copious blood-letting, claiming that what he had taken was insufficient, followed by chloral hydrate in ʒ ss doses every two or three hours, till sleep ensued, as the patient had not slept for three or four nights, and the calomel powders continued. The result was wonderful. The operation of bleeding over, in about five minutes after the first dose of the chloral hydrate the patient went to sleep and rested well till four o'clock next morning, and no convulsion occurred thereafter, a state of things in strong contrast with what had transpired during the four or five days preceding, when three or four men were required to hold him on the bed. In two or three days the patient was around again. One other attack occurred since, when, on being immediately summoned, I again bled freely, and administered chloral hydrate with the same result. The patient is all right up to date, nearly eight years having now elapsed since the last paroxysm. He has, however, been bled once or twice since.

Case 7th. Was called to see Mrs. G—, in the night, who had just given birth to twins, and was represented, previous to confinement, as being excessively large, out of shape, inferior extremities very much swollen, and altogether looking like a fright. Labor was attended by a midwife, and soon after delivery puerperal convulsions set in, and an irregular practitioner, who has passed through every shade of humbug, from the "magic rods" of European invention to the modern "equalizer" of American ingenuity, and represented every form and species of charlatanry known to the art, was called in, who, of course, prescribed and left, saying "he thought he could cure her, but sometimes these cases became very bad." During the fore part of the night he was sent for again, but "as he had already seen her and *knew all about her*," he could send medicine just as well (which consisted of three five-grain Dover powders), and he would come in the morning, which he did only to be told that he was no longer wanted. It is needless to say the convulsions continued with unabated violence, and no hopes were entertained of the patient's recovery. In the excitement of the moment, however, a rush was made for another physician, and just here I was ushered in, and the case at once was submitted to my care, which I reluctantly accepted, on condition that they would drop the former attendant and be satisfied with any result. On examination I found the pulse frequent, full and tense; unconsciousness, the patient not having yet recognized her children; when in a few seconds another terrible convulsion ensued, which I had the opportunity of witnessing, and which was repeated several times in rapid succession, and I exceedingly feared that death would result before anything could be done, the respiration being exceedingly difficult and almost impossible, the bronchi literally obstructed with viscid mucus.

In this state of things, not knowing how much blood had been lost at the delivery, I at first hesitated about bleeding from the arm, but at once sent for some leeches, which I knew were handy by, with the view to abstract blood locally from the temples. But in view of the alarming nature of the case, following my conviction that there was too great a pressure upon the blood vessels, especially of the head or base of the brain, and of the consequent imminent danger of my patient, I sprung my lancet upon a vein, with the view of watching the effect upon the pulse and other symptoms, and if unfavorable, to stop immediately. Before the leeches arrived I had drawn one quart of blood from the arm in a full, heavy stream, and with what effect? Why, during the operation, even, the pulse became softer, less frequent, and lost its extreme tension; the breathing was easier and more tranquil, and indeed all the symptoms were modified. Finally, the spasms relaxed, and fortunately no other convulsions occurred thereafter. I afterwards applied the leeches to the temples, and on the third day after delivery consciousness returned and recognition of her children. To the great surprise of all no further trouble was encountered, and the woman made a good and rapid recovery, and is happy in taking care of her little duplicate charges. I have attended the same woman again in a subsequent confinement, but took the precaution to bleed her a week or two previous to the event, and had no trouble.

Case 8th. December, 1871, was called to see Mr. H—, ten miles distant, in the night. Found him suffering from oblique inguinal hernia, with large tumor in scrotum. I first put the patient on his back, with hips elevated and legs flexed to relax abdominal muscles, and tried taxis, which failed. I then bled freely from the arm, and administered chloroform to anæsthesia, and in about an hour I succeeded in reducing the hernia by taxis, and thereby avoiding operation, to the great satisfaction of all.

Case 9th. Was called, February, 1875, to see Mrs. —, aged —, in confinement, primipara, a very strong, healthy, robust young German woman, who spoke no English. A German midwife was in attendance, who became frightened on account of what she called cramps manifesting themselves. A digital examination, per vaginam, distinguished os uteri dilated to the diameter only of an inch and a quarter, thick and tense, pains strong, and head presenting, but no progress, except in the way of dilatation, which was slow. In a few minutes a severe convulsion ensued, and I found I had a case of labor complicated with puerperal eclamsia, to deal with. Not having my lancet with me, I immediately went for it to my office, which was but a short distance, and on my return that convulsion was over, and no repetition had yet occurred. At once, however, for two reasons, viz., (1) to facilitate dilatation of os uteri, and hasten delivery; and (2) to prevent the convulsions, I opened a vein and drew about a quart of blood from the arm, in the hope that I would have no further trouble. For about an hour and a half, everything went on well, the os uteri dilating more rapidly, and the pains, all the time strong, became more regular when unexpectedly another convulsion occurred, which was very protracted, and the patient, getting her tongue between her teeth, wounded it badly. Again I repeated the operation of phlebotomy during the convulsion, allowing the blood to flow until the spasms relaxed and the struggles ceased, being governed more by the effect than the quantity of blood taken, which, however, was about another quart, besides, the bed was thoroughly sprinkled by the struggling of the patient. After bandaging the arm, on examination, I found os uteri dilated sufficiently, and at once applied long forceps and completed the delivery in a few minutes. Everything was all right, and the child large and lively. Next day I found patient in a good condition, feeling well and rejoicing in possession of her hard earned treasure. This patient also made a rapid recovery, notwithstanding her lingual complication. In the above examples, the blood was neither weighed nor measured accurately, as the object, as already intimated, was not so much the quantity of blood as the effect upon the system, though in each case such a dish was used as, with proper care, which was exercised, to prevent any great variation from the above estimates.

Reports of Societies.

Fourth Annual Meeting of the American Medical College Association.

Pursuant to the call of its Acting President, Prof. N. S. Davis, the American Medical College Association convened in Atlanta, Ga., at 10 A. M., May 3d, 1879. In appropriate terms Prof. Davis alluded to the death of Prof. J. B. Biddle, the former President of the Association, and suggested the propriety, at the proper time, of a committee to draft resolutions expressive of the high regard and respect entertained for his memory.

The presentation of credentials of delegates being in order, the following were received:

LIST OF DELEGATES.

1. Jefferson Medical College, Philadelphia, Pa.—Profs. S. D. Gross and Bodine.
2. Medical Department University of Louisville, Louisville, Ky.—Prof. John E. Crowe.
3. Hospital College of Medicine, Louisville, Ky.—Prof. Dudley S. Reynolds and Robt. L. Breck, D. D.
4. Medical Department Iowa State University, Iowa City, Iowa.—Prof. W. F. Peck.
5. Chicago Medical College, Chicago, Ill.—Profs. N. S. Davis and H. A. Johnson.
6. Detroit Medical College, Detroit, Mich.—Prof. Leartus Connor.
7. Starling Medical College, Columbus, Ohio.—Prof. Starling Loving.
8. Medical Department Universities of Nashville and Vanderbilt, Nashville, Tennessee.—Profs. Thos. Menees and W. T. Briggs.
9. Missouri Medical College, St. Louis, Missouri.—Prof. A. R. Lankford.
10. Kansas City College of Physicians and Surgeons, Kansas City, Mo.—Prof. T. B. Lester.
11. Miami Medical College, Cincinnati, Ohio.—Prof. John A. Murphy.
12. Louisville Medical College, Louisville, Ky.—Prof. C. W. Kelly.
13. Medical Department Michigan University, Ann Arbor, Mich.—Prof. E. S. Dunster.
14. Rush Medical College, Chicago, Ill.—Prof. Moses Gunn.

15. Texas Medical College and Hospital, Galveston, Texas.—Prof. Grensville Dowell.

16. Ohio Medical College, Cincinnati, Ohio.—Prof. W. W. Dawson.

17. Medical College of State of South Carolina, Charleston, S. C.—Profs. L. P. Chazal and J. F. Prioleau.

18. Medical Department University of Louisiana, New Orleans, La.—Profs. S. E. Chaille and E. S. Lewis.

19. Evansville Medical College, Evansville, Ind.—Profs. G. B. Walker and H. G. Jones.

20. Atlanta Medical College, Atlanta, Ga.—Profs. L. T. Johnson, J. H. Logan, J. T. Banks, W. A. Love, W. F. Westmoreland, J. G. Westmoreland, N. H. Taliférro, and A. W. Calhoun.

During the registration of delegates, the question was raised whether members from boards of trustees could be received as delegates by the Association. After discussion by Profs. Bodine, Gunn, Dunster, Murphy, Reynolds, Menees, Peck and others, the President ruled that boards of trustees could only be represented by their executive officer. The President said that all other representation as delegates must be from members of the faculty having a vote upon the passage of candidates for graduation.

The gentlemen who, by the ruling of the chair, were debarred from acting as delegates were, by vote of the Association, invited to a seat upon the floor during the session of the Association.

On motion of Prof. Menees, the reading of the minutes of the previous meeting was dispensed with—the same having been published last summer.

The consideration of amendments offered last year being in order, Prof. Dunster moved the adoption of the following amendment to Section 5, Article V, of the Articles of Confederation of the American Medical College Association:

Instead of "five per cent. of the number of matriculants," read "ten per cent. of the number of graduates."

Prof. Reynolds offered an amendment, substituting *five* for *ten* per cent.

On vote, both the amendment and original motion were lost.

On motion of Prof. W. T. Briggs, the credentials of Atlanta Medical College were accepted.

The following, offered by Bellevue Hospital Medical College last year, was adopted by the Association:

> Additional Section to Article VII of the By-Laws: Every college member and every affiliated college shall print each year a true list of matriculants of the college for the year, and their preceptors, or the names of the colleges at which the matriculants have graduated, in cases of those matriculants who are graduates in medicine, and every such college shall also print a true list of the graduates for the year.

The following, offered last year by Medical Department of the University of Nashville and Vanderbilt, was now adopted by the Association:

> "On page 14, of proceedings of the Association, in Article VI, in line 8, insert after the word rank, 'unless otherwise ordered by the Faculty.'"

Respecting the charges against the Louisville Medical College and Kentucky School of Medicine, the chair ruled that they could not be considered, for (1) they were preferred by a committee, instead of a college member; and (2) the author of the charges was not present at the meeting, nor had he sent a representative.

The report of the committee appointed last year to present a plan for the registration of colleges in good standing was, in the absence of its author, Prof. A. Flint, Jr., read by the Secretary. This report was received, and its consideration deferred till the afternoon session.

On motion, the Association adjourned till 3 P. M.

Pursuant to adjournment, the Association was called to order by the chair at 3 P. M.

On motion of Prof. Murphy, the reading of the minutes of the previous meeting was dispensed with.

The report of the committee on a plan for the registration of medical colleges being taken from the table, Prof. J. A. Murphy moved that the report, excepting the recommendations concerning a committee on medical colleges, be referred back to the original committee for correction and revision to date, and for greater condensation, with instructions to present it, thus revised, at the next annual meeting of the Association.

After an extended discussion of the questions involved in this motion, by Profs. Murphy, Gross, Dawson, Dunster, Chaille, Reynolds and others, it was finally adopted.

Prof. Murphy now moved the adoption of the following recommendations of the committee on a plan for registration:

> (1) That there be appointed each year, by the President of the Association, a standing committee of three, which shall be known as the Committee on Medical Colleges, and that the duties of said committee shall be the following: (*a*) Said committee shall procure, if possible, each year, the circulars and announcements of all the medical colleges of the United States. (*b*) The committee shall examine the said circulars and note any provision therein that appear to violate the requirements of the Association. (*c*) The committee shall make a report at each annual meeting of the Association, which shall embrace a list of all colleges that violate its requirements, with a full statement of the provisions violated.

The President appointed as the committee called for by the above: Prof. Leartus Connor, Secretary of the Association, Prof. E. S. Dunster and Prof. Jno. A. Murphy.

The Secretary's report being called for, the following was presented:

The total membership of the American Medical College Association to date is *twenty-eight* active members and one affiliated member. Five colleges have been admitted since the last annual meeting. Four applications are still pending. Indiana Medical College disbanded to become a part of the Medical College of Indiana—an applicant for membership at the present time. Twenty-one colleges have reported in whole or in part. Reports from three are not due until June:

THE COLLEGES THUS REPORTING ARE:

Cleveland Medical College, Cleveland, Ohio.
Medical Department University of Louisville, Louisville, Ky
Hospital College of Medicine, Louisville, Ky.
Medical Department Iowa State University, Iowa City, Iowa.
Chicago Medical College, Chicago, Ill.
Medical Department University of Wooster, Cleveland, Ohio.
Detroit Medical College, Detroit, Mich.

Starling Medical College, Columbus, Ohio.
Medical Department Universities of Nashville and Vanderbilt, Nashville, Ten.
Missouri Medical College, St. Louis, Mo.
Kansas City College of Physicians and Surgeons, Kansas City, Mo.
Miami Medical College, Cincinnati, Ohio.
Louisville Medical College, Louisville, Ky.
Rush Medical College, Chicago, Ill.
Bellevue Hospital Medical College, New York City.
Ohio Medical College, Cincinnati, Ohio.
Medical College of State of South Carolina, Charleston, S. C.
Columbus Medical College, Columbus, Ohio.
Woman's Hospital Medical College of Chicago, Ill.
Medical Department University of Louisiana, New Orleans, La.

COLLEGES WHOSE REPORTS ARE DUE IN JUNE, ARE:

Medical Department University of Vermont.
Dartmouth Medical College.
Medical Department Michigan University.
Kentucky School of Medicine.

COLLEGES WHO HAVE NOT REPORTED, ARE:

Jefferson Medical College.
College of Physicians and Surgeons, New York.
Texas Medical College and Hospital.
Alabama Medical College.

The Secretary read the written request of St. Joseph Hospital Medical College for the privilege of withdrawing its application for membership in the Association. The facts in the case were as follows: On March 20th, 1879, this College made formal application for membership in the Association, and the application was at once forwarded to each member of the Association. On April 2d, the Secretary received notice that Bellevue Hospital Medical College objected to the admission of the applicant, on the ground that its catalogue showed that it allowed four year's time to count as one course of lectures—this provision being in direct opposition to a provision of the Articles of Confederation.

The objection being forwarded to the St. Joseph Hospital Medical College, it replied that the ground of objection was correct, but that it could not at present so alter its requirements for graduation as to remove the grounds for objection. In view of these facts, it desired to withdraw its application.

The Secretary having no power to comply with the request, presented it to the Association for instructions. After a full discussion of the question, as a matter of privilege the St. Joseph Hospital Medical College was permitted to withdraw its application for membership.

The application of Dartmouth Medical College, for the acceptance of its resignation as a member of the Association was granted. The ground of this resignation was the alleged inability of Dartmouth to lengthen its course to twenty weeks, as required by the Articles of Confederation at and after 1880.

On motion of Prof. Bodine, it was

Resolved, That it is unlawful for credit to be granted to any student for two regular courses when the same are taken within less than fifteen months.

On motion of Prof. Peck, it was decided to make the election of officers the special order of business for 10 A. M., Monday morning.

On motion of Prof. Bodine, it was

Resolved, That gratuitous instruction of medical students by any member of this Association, otherwise than as provided for in sections 3, 4 and 5, Art. V of the Articles of Confederation, is unlawful.

On motion of Prof. Peck, it was

Resolved, That a committee be appointed by the chair to draft appropriate resolutions on the death of Prof. Biddle.

The chair named as such committee, Profs. Dawson, Gross, and Gunn.

Prof. Loving presented a report of the proceedings of the Convention of Medical Colleges held in Atlanta, May 2, 1879.

This report was received and made the special order of business on Monday.

Prof. Reynolds offered the following resolution:

Resolved, That members of this Association cannot in any way recognize the tickets of any institution, which, by reason of insufficient lecture term, or insufficient previous period of study are ineligible to membership in this body.

Laid on the table till Monday.

Prof. Bodine offered the following:

Resolved, That no school shall be recognized by this body as in good standing a majority of the members of whose faculty hold chairs in two or more separate schools.

Laid on the table till Monday.

Prof. Chaille offered the following:

Resolved, That it shall be considered derogatory to the dignity and good standing of any college represented in this Association to advertise in any other than a strictly medical publication the names of its professors, with their respective chairs. This resolution does not apply to the annual circulars and catalogues issued by the colleges, but to advertising in non-professional periodicals, newspapers and other like publications, in which only a casual calling attention to the advantages of the school, length of session, fees, etc., with the name of the executive officers and secretary appended, should be permitted.

Laid on the table till Monday.

On motion, the Association adjourned till 10 A. M., on Monday.

Pursuant to adjournment, the American Medical College Association was called to order Monday morning at 10 A. M.

The minutes of the previous meeting were read and approved.

The committee to draft resolutions on the death of Prof. J. B. Biddle, reported the following:

Since the last assembling of this Association, death has invaded our circle and launched his shaft with unerring aim against our presiding officer.

Prof. J. B. Biddle, who presided over the committee which called this Association into existence, and who was twice elected its President, was widely known as a gentleman of culture and refinement, a teacher who possessed the happy gift of imparting knowledge, a physician of rare ability, and an author whose written wisdom reached and benefitted his professional brethren.

To us, who have felt his guiding hand in our deliberations, he was known as an officer of quick perceptions, clear head, decisive ruling and winning urbanity.

While, then, we are compelled to bow in submission to the stern decree which has removed him from our midst, we cannot refrain from expressing our deep sorrow for our own loss, and tendering to his bereaved family our heartfelt sympathy in this their hour of grief and sorrow.

Let us honor his memory by emulating his virtues.

W. W. Dawson,
S. D. Gross,
Moses Gunn.

On motion, the report was accepted, adopted and ordered to be spread on a memorial page of our official report, and a copy of the same forwarded to the family of deceased.

Election of officers being in order, the ballot was taken with the following result:

President—Prof. S. D. Gross.

Vice-President—Prof. N. S. Davis.

Secretary and Treasurer—Prof. Leartus Connor.

Prof. Starling Loving, Secretary of the "Convention of Medical Colleges," read a report of the meetings of that body held in Atlanta, May 2d, 1879. At that meeting twenty-three colleges were represented by delegates from faculty, or trustees, or both.

The questions discussed by this body were: (1) Should all medical colleges require three regular courses of lectures, in three separate years, as one of the requirements for conferring the degree of M. D.? (2) Should all medical colleges require, before admitting to matriculation, a preliminary examination—such examination embracing, at least, the elements of the physical sciences, in addition to a fair English education?

It was agreed that with such a representation any general or binding action on these, or other questions, was impossible. Meantime, as interchange of views on these questions was regarded as desirable, the entire day was thus occupied.

The questions thus presented were answered by the convention by a vote in the affirmative, and finally referred to the American Medical College Association. The communication was accepted and placed on file.

Prof. Menees offered the following amendments to the Articles of Confederation of the American Medical Association.

Art. II., Sec. 3: For "*two* courses" read *three* courses.

Art. III., Sec. 3, third line: For "*two* regular sessions" read "*three* regular sessions;" fourth line: for "*two* full courses" read "*three* full courses;" sixth line: for "*two* full courses" read "*three* full courses."

Sec. 4: "For *two* yearly regular collegiate sessions" read "*three* yearly collegiate sessions."

Said amendments to take place at sessions of 1882–1883.

The amendments were seconded, and, under the rules, lie over for one year.

It will be seen that these amendments, if adopted, will require the members of the Association to exact three, instead of two regular courses of lectures in three separate years as a condition for conferring the degree of M. D.

Consideration of the second question was laid upon the table for one year.

The following resolution, by Prof. Bodine, was now taken from the table:

Resolved, That no school shall be recognized by this body as in good standing, a majority of the members of whose faculty hold chairs in two or more separate schools.

By permission of the Association, Prof. Bodine withdrew this resolution and offered the following amendment to Art. I of the Articles of Confederation:

"The majority of the members of one faculty shall not constitute the majority of the members of another faculty, unless the sessions of the two schools are held simultaneously."

Being seconded, this lies over till next year.

Prof. Dunster offered the following:

Resolved, That it is the sense of this Association that the recommendations of the general Convention of Medical Colleges, held at Atlanta, on the second day of May, 1879, ought to be adopted.

This was laid upon the table.

Prof. Chaille called from the table the following:

Resolved, That it shall be considered derogatory to the dignity and good standing of any medical college represented in this Association to advertise in any other than a strictly medical publication the names of its professors, with their respective chairs. This resolution does not apply to the annual circulars and catalogues issued by the colleges, but to advertising in non-professional periodicals, newspapers, and other like publications, in which only a card calling attention to the advantages of the school, length of session, fees, etc., with the name of the executive officers or secretary appended, should be permitted.

After full discussion by Profs. Chaille, Dawson, Murphy, Lankford and others, the resolution was adopted.

Prof. Chaille offered the following amendment to the Articles of Confederation:

For Art. VII, as it now stands, read Art. VIII.

Art. VII—Advertisements: No college shall advertise in any other than a strictly medical publication the names of its professors, with their respective chairs.

Being seconded, it lies over till next year for action.

AMERICAN MEDICAL COLLEGE ASSOCIATION,

TREASURER'S REPORT, MAY, 1879.

Twenty-six Annual Assessments		$130 00
Janitor, Buffalo Medical College	$ 2 20	
Printing and binding	29 00	
Postage, express, check collection	12 30	
Stationery	2 00	
Deficit in 1878	4 35	
		49 85
Balance on hand		$ 80 15

Assessments are due for the last year from the following colleges:

Texas Medical College and Hospital.
Dartmouth Medical College.
College of Physicians and Surgeons, New York.

On motion, the report was accepted and adopted.

Prof. Grenville Dowell offered the following:

Resolved, That the metric system shall henceforth be used in the minutes of this Association, and in all papers published under its authority, and that the professors represented in this Association be requested to teach the metric system in their schools.

It was laid on the table.

Prof. Dunster offered the following amendment to the By-Laws:

For Section 1, Article V, of the By-Laws, substitute the following:

Delegates to the meetings of the Association may be chosen from among the members of the governing boards of a college, or from members of the faculty having a vote upon the graduation of students, or from both; but in no case shall such double representation entitle a college to more than one vote in the Association.

Laid over until next year.

On motion of the Secretary, the thanks of the Association were tendered to Prof. Westmoreland, and the Georgia State officials for their courtesy in providing such comfortable and convenient rooms for the meetings of the Association.

On motion of Prof. Gross, the thanks of the Association were tendered the President and Secretary for their efficient services.

On motion, it was decided that the next meeting be held on Monday morning preceding the next meeting of the American Medical Association, and at the same place.

Adjourned.

N. S. DAVIS, M. D.,
Acting President.

LEARTUS CONNOR, M. D.,
Secretary.

American Medical Association—Thirtieth Annual Meeting.

Pursuant to announcement, this meeting convened in the Opera House of the city of Atlanta, Ga., at 11 A. M., May 6th. Being called to order by President Parvin, a fervent prayer was offered by the Rev. Dr. Gwinn. Dr. J. P. Logan, as chairman of the local Committee of Arrangements, presented an admirable address of welcome.

The list of registered members was now read by the Secretary, showing that delegates were present from thirty-one States. As usual, protests were offered against the admission of members from several States; in this instance from Arkansas, Indiana, and West Virginia.

The reports of the Committee of Arrangements on Permanent Members and Visiting were adopted. The citizens of Augusta, Ga., tendered the Association an excursion to their city, promising a "real old Georgia barbecue." The invitation was accepted and the time fixed for Saturday.

The President's annual address being in order, for an hour the Association was held spell-bound by the eloquent oration. Not one word was said of medical education, medical colleges, medical ethics, or even of the glories of the American Medical Association. In so far as its argument went, the speaker's aim was to direct attention to the reality of the spiritual world in its relations to the physical. Perhaps the key-note will be found in the perusal of the following concluding sentences :

Since we last met together, less than a year ago, hundreds of our profession have fallen victims to the pestilence that walked in darkness and wasted at noon-day in so many of the cities of the South. Some of those who thus fell in their efforts to save their fellow-beings from swift death, were in the meridian of their powers and of professional success. Others were in the fair morning, with the promise of long years and the hope of high honors. Can we believe that these heroic men live only in the memory of their friends? From all the martyr-memories of noble men and women, in every age, who counted not their lives dear unto them when principle was at stake, or in sublime self-abnegation sacrified their lives for kindred, for country, for humanity, there comes a solemn protest against denial of life beyond the grave.

Accepting gratefully all the facts of science, let us beware of rejecting everything that may not be capable of mathematical demonstration, and compelling our assent to absolute necessity. There may be truths more important, but less open; whisperings of hope that are sure promise of fruition. The poet tells of the sea-shell when, its polished lips shaken and applied to your attentive ear:

"And it remembers its august abodes
And murmurs as the ocean murmured there."

So we may hear the deep but distant murmur of the immortal sea as it beats against the shores of time, ready to bear upon its mighty bosom the children of men from life to life, and the law of continuity be found as true of the spiritual as it is of the material world.

Happy for us, though unlike the Thrainmo, we hold no festivities over the dead, if with something of the glad dream of hope, if not in the glory of triumph, we can adopt the familiar words of our great American poet:

"There is no death! what seems so is transition;
This life of mortal breath
Is but a suburb of the life elysian
Whose portal we call death."

Never have we seen this Association so stirred by a speech as it was during and after the delivery of this oration. Here and there was the face of an unbeliever, but even these were overcome by the spirit of the orator. Enthusiastic thanks were tendered Dr. Parvin, and the address ordered published.

The indefatigable apostle of the metric system, Dr. E. Seguin, of New York, presented a report on this topic, and offered a resolution to the effect that the Association adopt the metric system and all its correspondents.

The amendment to the Constitution providing for the consolidation of the sections on medical jurisprudence, chemistry and psychology, and the department of State medicine and public hygiene, was adopted.

Adjourned till 9.30 A. M., Wednesday morning.

Pursuant to adjournment the Association was called to order by Vice President Murphy. By vote, the Association again requested Congress to remove all duty from quinine. The address on Practical Medicine, etc., was now read by Dr. Thomas F. Rochester, of Buffalo, N. Y. Portions of the paper referring to typhoid and yellow fever were referred to the section on State medicine.

Owing to the illness of Dr. John S. Billings, his paper on State medicine was read by Dr. J. J. Woodward. It stated fully the philosophy of the National Board of Health, explaining the necessity for a national quarantine.

Dr. N. S. Davis, of Chicago, made a report from a special committee on questions discussed by President T. G. Richardson in his annual address of last year, which was received. They favored the amendments proposed for the present rules on prize essays. They recommended the expunging from section 3 all relating to prize essays, and to insert a clause declaring that there shall be four prizes of $250 for the best original contributions to medical knowledge. The chairmen of the sections on practical medicine, on obstetrics, and surgery and anatomy, on State medicine, shall take charge of the competition and arrange its methods. The report was to lie over for action until next year under the rule.

The amendment requiring the Committee on Nominations to choose all officers from members present was tabled. The amendment offered by Dr. H. O. Hitchcock, prescribing the method in which the choice of officers should be made, was laid upon the table. The amendment to create a new section on neurology and electrology was also tabled. The amendment to create a new section on genito-urinary organs, including syphilis and dermatology, was referred to the section on surgery. The amendment to the code of ethics, rendering it derogatory for physicians to aid in teaching the avowed adherents of irregular medicine, was now brought forward. Prof. E. S. Dunster, of Ann Arbor, in a very polished and engaging address, lasting until the time for adjournment, opposed the adoption of the amendment. It being manifestly unfair to vote without giving equal chance to those entertaining contrary views, the question was laid over until another year. The amendment, stripped of all outside considerations, simply says that it is unethical to associate with irregular practitioners, then it is unethical to aid in making them. If it be right for medical teachers to make such irregular practitioners, then it is right for physicians to consult with them. In either case the financial is the obvious consideration. Let there be no unjust privileges to the professor over those of his lay brother.

After choosing members of the nominating committee, the Association adjourned till Thursday morning at 9.30.

Pursuant to adjournment the Association was called to order by President Parvin. A brief report on ozone was made by Dr. N S. Davis and referred to the publishing committee. A necrological report was made by Dr. G. M. Jones, including those who died of yellow fever in 1878, though not members of the Association.

Reports on the national library by Dr. H. C. Wood, by the Secretary of the Association, by the Treasurer and Librarian were next read.

The next business in order was the presentation of a paper on State medicine, which Dr. Chaille, of New Orleans, had read in the section of State medicine Tuesday afternoon The paper took such a philosophical view of a great question that the section ordered it referred to the Association. Dr. Chaille's views are along with the most advanced theories on this subject. He appealed for the thorough establishment of a sound system of State medicine, in which the general government should regulate without interfering with any necessary powers of the State. He argued that it lay in the power of the American Medical Association to effect the reforms needed in the present condition of State medicine. In England, State medicine is easily and judiciously regulated by the influence of the British Medical Association on one central legislative power, while in America this power must be frittered away on the local legislatures on forty-eight States and Territories. He argued for a more permanent organization in minor medical societies and the consequent increased efficacy of the American Medical Association. His views of the powers of general government over medical matters, both as related to sanitary and moral questions, were very strong, and to some may have appeared radical. The thorough study which Dr. Chaille has given this question and his known liberality of views on all subjects make it certain that in this paper he does not go to any extreme which prudence would disapprove, nor did he advocate any principle by reasons which are not in sympathy with the general opinion of the most learned and most patriotic men of our day and nation. The paper was pregnant with theoretic principles strengthened by sound practical suggestions. It was really one of the most practical papers of all the long list which will come up at this session, and its reading in the section started a series of discussions on its propositions, which its presentation to the Association will bring into much fuller view. The paper was referred back to the section where it had been first presented.

The address on surgery was now given by the chairman of that section, Dr. Moses Gunn, of Chicago. Its text was pus, and the address dealt with it in the light of modern investigations.

The Committee on Nominations presented the following report, which was adopted:

President—Dr. Lewis A. Sayre, of New York.

Vice-Presidents—First, Dr. R. Beverly Cole, of California; Second, Dr. E. M. Hunt, of New Orleans; Third, Dr. H. O. Marcy, of Massachusetts; Fourth, Dr. F. Peyre Porcher, of South Carolina.

Treasurer—Dr. R. J. Dunglinson, of Pennsylvania.

Librarian—Dr. Wm. Lee, of District of Columbia.

Committee on Library—Drs. Johnson, Eliot, District of Columbia.

Assistant Secretary—Dr. Walter Gillette, of New York.

Next place of meeting—New York.

Time of meeting—Not yet fixed.

Committee of Arrangements—Drs. L. O. Vanderpoel, Stephen Smith, William M. Polk, Robert Weir, Charles I. Paidee, A. A. Smith, T. F. Sabine, of New York; Joseph Hutchison, of Brooklyn; M. H. Burton, of Troy; and Dr. Parker, of Poughkeepsie.

Committee on Prize Essays—Not yet appointed.

Committee on Publication—Drs. W. B. Atkinson, T. M. Dugsdale, A. Fricke, L. D. Gross, Caspar Wislar, R. J. Dunglinson, of Pennsylvania, and William Lee, of District of Columbia.

The following nominations for chairmen and secretaries of sections of 1880 are reported:

1. Practice of Medicine, etc.—Dr. J. S. Lynch, of Maryland, chairman; Dr. W. C. Glasgow, of Missouri, secretary.

2. Obstetrics, etc.—Dr. Albert Smith, of Pennsylvania, chairman; Dr. Robert Battey, of Georgia, secretary.

3. Surgery and Anatomy—Dr. W. T. Briggs, of Tennessee, chairman; Dr. J. Powell Adams, of Minnesota, secretary.

4. State Medicine, Medical Jurisprudence, etc.—Dr. James F. Hibbard, of Indiana, chairman; Dr. T. F. Wood, of North Carolina, secretary.

5. Opthalmology, etc.—Dr. Bolling A. Pope, of Louisiana, chairman; Dr. Eugene Smith, of Michigan, secretary.

Committee on Necrology—Dr. J. M. Toner, of District of Columbia, chairman; Drs. R. F. Mitchell, of Alabama; J. P. Wall, of Florida; F. W. Hatch, of California; J. B. Cummings, of Arkansas; C. Denison, of Colorado; G. W. Russell, of Connecticut; J. H. Richards, of Delaware; T. S. Hopkins, of Georgia; J. H. Hollister, of Illinois; G. L. Sutton, of Indiana; H. B. Ransom, of Iowa; C. V. Mottrom, of Kansas; Dudley S. Reynolds, of Kentucky; E. A. Lewis, of Louisiana; E. F. Sanger, of Maine; John Morrison, of Maryland; L. F. Warner, of Massachusetts; G. E. Ranney, of Michigan; D. W. Hand, of Minnesota; John Browning, of Mississippi; J. M. Richmond, of Missouri; J. R. Black, of Nebraska; L. S. Hill, of New Hampshire; H. D. Didama, of New York; John Blaine, of New Jersey; T. J. Haywood, Jr., of North Carolina; Starling Loving, of Ohio; Frank Woodbury, of Pennsylvania; C. H. Fisher, of Rhode Island; Manning Simmons, of South Carolina; J. B. Lindsay, of Tennessee; H. W. Brown, of Texas; O. F. Fassett, of Vermont; L. S. Joynes, of Virginia; R. W. Hazlett, of West Virginia; J. T. Reeves, of Wisconsin; J. J. Woodward, of United States Army; A. L. Guion, of United States Army.

Time of meeting—First Tuesday in June, 1880. Place—New York.

Committee on Prize Essays—Drs. Austin Flint, chairman; Alfred C. Post, Joseph Hutchinson, J. W. S. Gouley, Montrose H. Pallen, all of New York.

Members of Section on State Medicine, Public Hygiene, etc.—Drs. W. H. Hawkins, Arkansas; Jerome Cochrane, Alabama; W. F. Cherry. California; C. Denison, Colorado; C. A. Lindley, Connecticut; Wm. Marshall, Delaware; Thomas Antisell, District of Columbia; J. P. Wall, Florida; J. P. Logan, Georgia; S. Brondeis, Kentucky; S. E. Chaille, Louisiana; A. P. Snow, Maine; T. B. Evans, Maryland; H. I Bowditch, Massachusetts; H. B. Baker, Michigan; C. N. Hewett, Minn; Wirt Johnston, Mississippi; H. H. Mudd, Missouri; J. Black, Nebraska; G. P. Conn, New Hamphshire; D O. English, New Jersey; A. N. Bell, New York; J. C. Walker, North Carolina; J. C. Reeve, Ohio; H. Carpenter, Oregon; Benjamin Lee, Pennsylvania; E. M. Snow, Rhode Island; R. A. Kinlock, South Carolina; Dr. T. A. Achison, Tennessee; H. W. Brown, Texas; F. D. Cunningham, Virginia; L. C. Butler, Vermont; E. A. Hildreth, West Virginia; J. T. Reese, Wisconsin; Joseph R. Smith, United States Army; A. L. Gihon, United States Army.

The committee also reported regulations of printing the proceedings of the Association and the deposit of its funds.

The annual address on Obstetrics was read by the chairman of that section, Dr. E. S. Lewis, of New Orleans. It discussed the latest advances in this field from the stand-point of a large personal experience.

On motion of Dr. Chaille, it was resolved to petition Congress to allow any student of scientific pursuits to import free of duty any one book for his own use.

Dr. Brodie offered a resolution declaring the use of patent medicines to be contrary to the code of ethics.

Adjourned till 9 A. M., Friday morning.

Pursuant to adjournment, the Association was called to order at 9 A. M., Friday morning. A resolution looking to the thorough organization of State societies, and prescribing stricter rules for admission into the American Medical Association, was adopted.

The President appointed the following committees:

To Represent the Association Abroad—Drs. Seguin, Yandell, Costa, Gunn, Turnbull, Warren, and J. T. Hodgson.

Delegates to Canadian Association—Dr. H. Hutchins, Dr. W. Brodie.

On Dr. Chailles' Resolution on Public Hygiene and its Regulation by Congress—Drs. Pratt, Davis, Garcelon, Gross, and Bell.

The address on Ophthalmology and Otology was now read by the chairman of this section, Dr. H. Knapp, of New York. As was to be expected, it was an able paper, worthy of its distinguished author and his audience.

The Committee on Prize Essays reported only one essay for a prize. This was written by Dr. McLane Hamilton, of New York, and was on the subject of primary and secondary (local) degeneration of the lateral columns of the spinal cords. The committee highly commend the essay, and recommend that a prize of $100 be awarded for it. An essay on "Explorations in Physiology" was highly commended, but the second prize was withheld.

Resolutions of thanks to those who had entertained or aided in any way the attainment of the ends of the meeting were most heartily passed. The President elect, Dr. L. A. Sayre, was now introduced, and the Association adjourned.

SOCIAL FEATURES OF THE MEETING.

In our own opinion, the most important objects of the Association are essentially social. Hence all that tends to bring the members into free, unrestrained intercourse is deserving of the highest praise. At Atlanta the Association was literally overwhelmed by hospitality. On Tuesday evening the genial, whole-souled Governor of Georgia received the members. On Wednesday evening thirteen different houses were opened with all the freeness of southern hospitality. Our hosts gave us *themselves*, as well as a bounteous repast, and the use of their elegant homes. They must have hearts of stone who were not melted at these generous entertainments. Thursday evening was celebrated by a magnificent banquet at the Kimball House. Several hundreds partook of the tempting repast, and enjoyed the music, the wit, humor, fine thought, pathos, and brotherly love called forth in response to the toasts.

On Friday night the elite of Georgia assembled at the Kimball House to honor their guests by music, and dance, and social commingling. Of the excursion to Stone Mountain, and to Augusta, and the thousand attentions given to individual members of the Association we cannot speak, but we doubt if ever the Association was more heartily welcomed, and in proportion to circumstances more royally entertained. In numbers the meeting was relatively small, aggregating only about three hundred and fifty.

SECTION WORK.

It will be remembered that the entire Association is divided into five sections, whose meetings occupy each afternoon. Without reference to days we shall briefly chronicle some of the work done by each.

Practical Medicine, Therapeutics, and Physiology—Chairman, Dr. Thos. F. Rochester ; Secretary, Dr. Glasgow, Missouri.

Dr. Davis, of Chicago, read a paper on clinical and meteorological records. The Doctor showed a thorough knowledge of his subject. His paper was referred to the Committee on Publication.

A paper from Dr. Dennison, of Colorado, was read by Dr. Davis. Its subject was "Aero-hygienics of Elevation above the Sea," with conclusion, and was referred to the Committee on Publication. A paper by Dr. L. D. Bulkley, on the "Use of Water in Treating Disease," was attentively received, and, after quite full discussion, referred for publication. A considerable discussion was elicited by Dr. Rochester's views on quarantine, as presented in his annual address. Dr. G. V. Cooper, of Georgia, read an elaborate paper on veratrum viride and its uses. Dr. Glasgow, of Missouri, presented a paper upon "Plastic Bronchitis." Dr. Shoemaker, of Philadelphia, one on "Inflammation of the Beard Follicles." These were received and referred to the appropriate committee.

Section on Obstetrics and Diseases of Women and Children—Dr. E. S. Lewis, of New Orleans, chairman, and Dr. Robert Batty, of Georgia, secretary. Dr. Batty presented a paper on "Intra-ovarian Pregnancy," illustrated by the details of a case. Papers were also read from Dr. E. Cutter, of Massachusetts, on "Electrolysis of Fibroids," and from Dr. W. H. Byford on "Dysmenorrhœa." Drs. Pallen, of New York, and H. F. Campbell, of Georgia, presented a variety of pessaries, which called forth a diversity of views characteristic of the unsettled state of opinion on this subject. Dr. Chadwick's new gynæcological table was presented and described by Dr. Marcy, of Cambridge. Dr. E. B. Turnipseed, of South Carolina, presented a variety of instruments designed to facilitate the examination and treatment of various female diseases, especially vesico vaginal fistula. Dr. Pallen presented large drawings of a lacerated perineum, and from these demonstrated his mode of operating.

Section on Anatomy and Surgery—Dr. Moses Gunn, chairman, and Dr. J. R. Weist, of Indiana, secretary. Dr. A. C. Post, of New York, read a paper on deformities of face and hands occasioned by cicatricial contraction following burns, with reports of cases successfully treated. After a free discussion by many of the gentlemen present, the paper was referred to the Publishing Committee. A paper on "Aspiration of the Knee-joint," by Dr. H. O. Marcy, of Massachusetts, was very suggestive, and after discussion was referred. Dr. E. B. Turnipseed, of South Carolina, presented a new surgical needle, curved and spring clamp at point; a new apparatus for treating fracture of the clavicle; a paper describing a new method of reducing dislocation of the elbow-joint. Dr. C. V. Mottram, of Kansas, read a paper upon "Chronic Dislocation of the Hip-joint." Dr. W. W. Dawson showed some specimens of vesical calculi. Papers were also read and referred from Dr. J. N. Quinby, of New Jersey, on "A Case of Conservative Surgery;" by Dr. L. A. Sayre, of New York, on "The Value of Treating Potts' Disease by Suspension and Retention in Position by the Plaster of Paris Bandage;" by Dr. J. E. Link, of Indiana, on "Amputations by Open Cone-shape Method;" and by Dr. H. F. Campbell, on "Urinary Calculus, with Consideration of its Hygienic, Etiological, Pathological and Surgical Relations;" by Dr. William Scott, on "Ecrosure for Removal of

Uterine Tumors;" by Dr. J. Weist, of Indiana, on "The Treatment of Hæmorrhoids by Carbolic Acid Injections;" by Dr. Maddus, on "The Nature of Gonorrhœa;" by Dr. F. F. Rochester, on "Perityphlitic Abscess opening into the Bladder and Rectum;" and a "New Instrument for the Administration of Anæsthetics," by Dr. Pollock, of Pennsylvania.

Section on Psychology, State Medicine and Hygiene, Medical Jurisprudence and Chemistry—Dr. J. L. Cabel, chairman, and Dr. J. T. Reeve, of Wisconsin, secretary.

The first paper presented to the section was by Dr. H. A. Johnson, of Illinois. It was on the subject of the regulation of medical practice by State boards, as exemplified in Illinois. The paper was a full exposition of the thorough reform effected under the provisions of the new law. The thorough acquaintance of Dr. Johnson with the practical workings of this system made his paper of great value as a medical document. The paper was received with the thanks of the section.

Several of the members of the section asked questions as to how the present law in Illinois worked.

Dr. Rauch, of Chicago, spoke fully of the success of the present system of regulation in Illinois, and the good it had accomplished to the people generally as well as to the profession in elevating its grade.

Dr. Guion, of the United States army, believed in the thorough regulation of the practice by the State in such a manner as to prevent quacks from imposing on the public simply because they could show a diploma.

Dr. S. E. Chaille, of New Orleans, read an exhaustive paper on State medicine and State medical societies, which held close attention and created an impression by its logical analysis of the question suggested. The paper was a masterly plea for State medicine and its systematization as the only means by which government could perform its high duties to the people.

Dr. Bell moved that a vote of thanks be returned to the author of the paper. He spoke in very high commendation of it and moved its reference to the general session.

The next paper was a very scientific thesis on psyschophysiological hand, by Dr. E. Seguin, of New York. It was exceedingly interesting and was closely attended by the joint section. The theory of the paper was that in cases of idiots all education of intellect must begin by education of the senses. He gave a most interesting case of education of an idiot by a Miss Meade in New York.

Dr. Grissom, of North Carolina, presented a report from the committee appointed to draw a fitting memorial on the death of Dr. Compton, of Mississippi. The memorial was a beautiful tribute to the memory of the good and gifted man of whom they spoke. The report was signed by Drs. Grissom, Toner and Pratt. The memorial concluded with resolutions expressive of the regret of the section at the untimely death of this distinguished Mississippian, and declaring that his memory will be cherished with the virtues his life presented.

Dr. Taylor, of Kentucky, asked the honor of moving the adoption of the resolutions.

Dr. Browning, of Mississippi, seconded the motion, and the resolutions were adopted.

A paper on "The new principles of protective sanitation in its relation to public hygiene," by Dr. H. R. Storer, of Rhode Island, was next in order. The author was absent, but his paper was read to the section, by Dr. E. S. Dunster, of Ann Arbor, Michigan. It occupied about thirty minutes and held close attention. It was full of historical knowledge and sound suggestions of true sanitary policy.

The paper was referred to Committee on Publication.

Dr. E. Seguin, of New York, made some remarks on the intervention of physicians in education, the subject which Dr. O'Sullivan had been expected to treat. His views were forcibly put and were heard with attention by all.

The section took up some resolutions offered by Dr. Billings, that the American Medical Association recommend that every physician aid the Superintendent of the census in his efforts to make up his statistics of mortality. That every physician make a record of all his cases from the first of June. Every physician in the United States will be furnished with blanks for filling out the reports asked. The resolutions were adopted.

Resolutions on the organization of the profession in all States were read. It was proposed to organize all members of the profession in good standing into county organizations. The section gave its approval to such a course whenever it may be deemed necessary.

Dr. E. L. Chaille, of New Orleans, presented a series of resolutions looking to the appointment of a committee on medical organization. On motion the report was adopted.

The report of Dr. Chaille was referred to the Committee on Publication.

A paper on the medical examiner system of Massachusetts was read and referred to the Committee on Publication.

The report of Dr. Billings, of Washington, chairman of the section on the question of hospitals, was read. It was referred to the Committee on Publication, with instructions to consult with Dr. Billings as to the manner of publication, etc.

The report was accompanied by diagrams and lithographic illustrations of hospitals for small towns, on approved plans.

Dr. Alban S. Payne, of Virginia offered a paper on the treatment of small-pox in the stages of initial fever.

Section on Ophthalmology and Otology, Dr. H. Knapp, of New York, chairman, and Dr. Calhoun, of Georgia, secretary. Dr. E. Williams, of Cincinnati, read an elaborate paper upon "Bony Tumor of the Orbit." To this elaborate presentation of facts the chairman added his own experience and knowledge, thus making the consideration of the subject practically exhaustive.

Dr. Voorhees, of Memphis, Tenn., reported a case in which within a week a young woman took by mouth and rectum three ounces of quinine. Her ears were unaffected, but she became perfectly blind, and for a long time remained so. The optic discs presented the appearance of atrophy. After a long time slight vision returned and a slight arterial twig was seen in the optic disc of the left eye. It was not shown that any previous organic disease of the optic nerves had existed. Hence the relations of the quinine to the blindness was not apparent. Dr. Knapp presented microscopical demonstrations of, and remarks upon, a large tumor of the acoustic nerve. Also of a case of degeneration of the iris and ciliary body, probably of a syphilitic or tuberculous nature. An extended discussion occurred upon the symptoms and course of treatment of syphilitic diseases of the cornea.

Elaborate papers on cataract were read by Drs. Pope, Cahoun and Knapp. These, with the discussions and demonstrations that followed, may be said to have fairly covered the ground of hard cataract.

Dr. Reynolds read a paper on the "Radical Cure of Cystoid Cicatrix by Operation." Dr. E. Smith, of Michigan, read a paper on the "Operative Cure of Xerophthalmia." Dr. Knapp presented a specimen of plastic cyclitis, and one of a piece of brass free in the posterior chamber. Dr. Knapp also read a paper upon "Mastoid Disease." He also presented a number of fine specimens illustrating a variety of diseases of the eye ball and ear.

National Board of Health—Its Meeting at Atlanta, Ga., May, 1879.

The organization of this Board has been fully given in previous issues of the DETROIT LANCET. The Atlanta meeting was held at the same time as the American Medical Association, in order that the Board might avail itself of the experience and knowledge of the eminent sanitarians gathered in that body. It was literally a conference meeting. It was hoped that by such conference the action of the Board might be made to represent the nearest attainable approach to absolute truth. Necessarily, a diversity of views were presented upon most of the topics discussed. Thus, as to the "sanitary history of a vessel in a foreign port," one thought the yellow fever sought the bilge water, and another thought bilge water had nothing to do with carrying yellow fever. Other points discussed were "the sanitary treatment of a vessel on its arrival from an infected port." "The relative danger of steamers as compared with sailing vessels in carrying infection." A special paper on "The Plague" was read by Dr. Chancellor, of Baltimore. He said the assembly was not to consider one epidemic disease. Last year the yellow fever carried death into the households of the Mississippi Valley. This epidemic has attacked alternately the Atlantic coast and then the Mississippi valley. He said there are other dangers than yellow fever. There are cholera and the plague to be dreaded. He had investigated the question of the plague, and wished to bring to notice a danger which might press itself on us within six months. He had different ideas of quarantine from those generally received. The great need is not to stop commerce, but to enforce strict sanitary laws in cities. His paper was an inquiry into the history of the plague, but referred especially to the proper methods of quarantine against it. His paper was very able and interesting. It was twenty-five minutes long and held the close attention of the board and spectators. The position taken in the paper was that no epidemics like yellow fever and the plague are contagious from the person or the clothing. They can only spread when the condition of the air is favorable, and, therefore, there is no reason for a quarantine. The source is back of this. It is in the condition of the cities where the epidemic is to spread. He said the support of a great national quarantine would be stupendous folly if it tried to keep out epidemics by excluding merchandise.

On the subject of inland quarantine the following topics were considered:

(1.) River transportation.

(*a.*) How to secure a steamer freedom from infection at New Orleans.

(*b.*) How to deal with steamers at ports along the Mississippi and its tributaries.

An expression of opinion from Dr. White, of New Orleans, was called for. Dr. White stated that the only way he saw of preventing the infection of a vessel in the port of New Orleans was to prevent it from coming alongside an infected vessel. The law of Louisiana provides that an infected ship shall be removed from port to the quarantine station; so that ships rarely become infected from contact with infected ships in port. A ship that had been infected should be thoroughly cleaned up and hold whitewashed before she was allowed to go up the Mississippi.

Mr. Eicklehart, of Vicksburg, agreed with Dr. White's views, but thought that an infected vessel should be sunk just below the hull for disinfection.

Dr. Chaille, of New Orleans, remarked that if they accepted the general belief that textile fabrics are a source of great danger in transmitting the fever, the great question was not what should be done with the hull of a vessel, but after that what measures should be taken that these materials shall not be transported to ports above. Called for speeches on the question.

Dr. Mitchell, of Tennessee, said that the only resource Tennessee had against the fever was to establish a total non-intercourse with infected ports; 99-100ths of the people believe in quarantine. It was humiliating to admit that this was the only preventive. A subject of great importance was to find means by which communication could be kept up with an infected port. Of all vessels of river navigation he looked upon the barge as one of the greatest sources of danger—on account of the usual nature of their cargoes, their architectural construction and their poor ventilation. In 1873 Memphis was infected from a barge, and, doubtless, in the same manner last year. River commerce needs protection from this source of infection. Mr. Mitchell also advocated the feasibility of a system of stations of inspection to be located along the Mississippi, so that it could be ascertained if a vessel became infected between ports. He was satisfied that total non-intercourse provided protection against infection, but that preventive was undesirable.

Mr. Nash, of Norfolk, stated that during the epidemic in Richmond and Lynchburg, Norfolk kept up continual intercourse with these cities by transferring freight at Hampton Roads. Thought the same system might be practicable on the Mississippi River.

Dr. Kauch, of Illinois, made quite a lengthy speech in support of the theory that the treatment of inland commerce should be analagous to that of foreign commerce. The prevention of the introduction of infectious diseases should be the work. Under ordinary circumstances a steamer should be examined at New Orleans before being allowed to go up the river. In times of an epidemic extra precautions should be taken. Stations should be located along the Mississippi for the care of the sick and for the disinfection of vessels. It is barbarous the way passengers and crews are treated in time of an epidemic. If the captain cannot land them in cities they land them in swamps or anywhere along the river. Humanity demands a system of inland prevention as well as a foreign quarantine.

Dr. Pinckney Thompson, of Kentucky, stated that to his mind it was clear that yellow fever can be carried from place to place in textile fabrics. What can, then, be done by up-river towns when fever is in New Orleans but to prevent steamers from landing? There are but two resources for these towns. One, to keep themselves in such a sanitary condition as to render the introduction of the yellow fever harmless; the other to insist that New Orleans keeps the yellow fever from her port just as New York does. When the fever is not in New Orleans, the towns along the river are always safe.

Dr. A. N. Bell, of New York, who had been repeatedly called for during the morning, now arose and cited the experiments that he had made in heat disinfection. He stated that thirty-one years ago he was called upon to take measures against the yellow fever on a schooner that came from a point where the disease had been raging two years. For three hours he steamed the ship under as intense heat as the boilers would give; then he scraped and painted the vessel, and three weeks later no case of sickness was on board. A year later the ship went on a cruise in the worst fever ports of the West Indies and no case of fever was developed on board. At the same time and place he treated a gunboat in the same manner with the same results. Sometime later two boats were taken from the same squadron to New York, passed quarantine, but, though no cases of fever had been aboard for some months, the men engaged in remodeling them in a New York dock were infected with the fever. These boats had not been disinfected by the steam process. Other experiments in steam disinfection, which Dr. Bell has since made in person, were cited, and though there have been some failures he attributes them to a lack of thoroughness in the process. Steam heat is preferable to dry heat, because the former can be used with less damage to goods.

The next subject for discussion was:

Railroads, (*a*) Sanitary condition of depots and stations. (*b*) Quarantine stations on railroads, their position and organization; specify for passenger trains, sleeping cars, car construction, freight trains, construction trains. (*c*) Mails. (*d*) Expressage.

Dr. Kedzie offered on this subject the following resolution:

The depots and stations of railroads and their surroundings shall be kept in a sanitary condition, free from all stagnant water and decomposing organic matter; the local railroad agent or official shall daily inspect the water-closets, and shall cause the floor, seats and urinals of such water-closets to be kept clean; he shall cause the vaults to be emptied at least every three months, and from the 1st of May to the 1st of November, he shall cause the privy vaults to be disinfected every week by pouring into every vault a solution of twenty to fifty pounds of sulphate of iron or sulphate of zinc, or ten to fifteen pounds of chloride of lime.

Dr. Kedzie said that fever often germinated in the North from causes that the resolution does away with. Germs of disease from decomposition are carried into the air and then through the air to quite a distance. Cholera propagated in the same way.

Dr. Howard spoke of the importance of railway travel in yellow fever sections. On his way to the fever district last summer, he entered a sleeper, in company with other persons, in which he was positively assured there had been no fever. Soon afterwards learned that there had been dozens of cases aboard the car. When they arrived in Mississippi a man in the car was attacked with the fever. They bundled him up in the fever-infected blankets of the car, and put him in a fever-infected berth. The engineer was soon attacked and treated in the same way. Soon afterwards a lady in the car showed unmistakable symptoms of the disease; she also was cared for in the same manner. This car, at their destination, was immediately sent back on a trip to Cincinnati. The doctor cited other instances of similar scenes from his own experience.

Dr. Kedzie here offered a resolution entitled, "Ventilation of cars," as follows:

> All railroad cars should at all times be well ventilated; the freight cars, when loaded, should have barred doors, to prevent the free entrance of air at all times, whether moving on the track or placed upon the sidings; the passenger and sleeping cars should be provided with automatic ventilators, so as to secure a rapid change of air in the cars at all times.
>
> The upholstering of all passenger and sleeping cars, including the cushions of seats and mattresses of sleepers, shall at least twice a week, and in the open air as far as possible, be thoroughly whipped and brushed, and the blankets and curtains of sleepers shall be whipped and sunned thrice weekly.
>
> In case of infection of a car or sleeper, the bedding, mattresses, and all the upholstering shall be thoroughly disinfected before permitted to be again used.

Dr. Cobb, of Pensacola, cited cases that had been introduced by railroads.

Dr. Rauch said there was no doubt that cars could be sent from New Orleans to Chicago without danger, but doubted about points further South.

After a short discussion as to whether fever could be conveyed to a town, save by direct communication with an infected town, the following important resolution was presented by Mr. Cobb, Mayor of Pensacola:

> *Whereas*, The National Board of Health has been constituted for the purpose of investigating relative to the public health, and particularly in epidemic diseases, as to the best course to be pursued, which must be, in some degree, a matter of experiment in ports north of Cape Hatteras;
>
> *Resolved*, That we recommend the petition of the delegates from the second oldest city in the Union be granted, and that the National Board of Health take immediate charge and control of maritime at the port of Pensacola in the event of the failure of Congress to provide means, and also to empower the

National Board to take charge of quarantine when called upon by the municipalities.

We respectfully ask that the Navy Department be empowered to take charge of quarantine at that port, rather than the Marine Hospital Service of the United States.

S. C. COBB,
Mayor of Pensacola.

GEO. H. O'NEAL,
President of the Board of Health.

The committee which had been appointed to draft propositions concerning sanitary measures along railroads reported through their chairman, Dr. Kedzie. The propositions were voted upon in the following order:

(*a*) Sanitary condition of depots, stations, round-houses, car-shops, grounds, etc.

At all seasons of the year the depots and surroundings shall be kept in a sanitary condition, the grounds well drained and free from stagnant water and decomposing organic matter; the water closets shall be daily inspected by the local railroad agent or official, who shall cause the floor, seats, and urinals to be kept clean and free from all offensive odor; the vaults shall be emptied so often as to prevent any large accumulation of excremental matter, and shall be disinfected every week by pouring into the vault a saturated solution of the sulphates or chlorides of iron or zinc in sufficient quantity to remove all offensive odors.

The proposition was adopted with little debate.

(*b*) Quarantine stations on railroads.

Whenever a railroad train departs from an infected station no person with fever shall be allowed to take passage on such train. The baggage from such infected station shall be thoroughly disinfected before leaving such railroad station. At a point not less than five nor more than seventy-five miles from the point of departure from an infected place, there shall be an entire transfer of passengers and baggage to another train of cars, which train shall never enter an infected district; this transfer shall be made under the supervision of a medical officer; no person with fever shall be allowed to proceed on this train, but shall return to the point of departure, or be treated in hospital at the place of transfer.

No sleeping-car shall be allowed to remain in an infected town, nor shall any sleeping-car approach nearer an infected place than this point of transfer. Any passenger-car leaving an infected place shall be thoroughly ventilated during its passage to the place of transfer, by having not less than one-half of the windows of the cars open during such passage.

The upholstered seats of passenger and sleeping-cars, and the mattresses and pillows of sleeping-cars, shall be thoroughly whipped or beaten (in the open air so far as practicable), and brushed free from all dust, and thoroughly aired and sunned at the end of each trip; the blankets and curtains of all sleeping-cars shall also be beaten and aired in the same way. The cars which carry freight without breaking bulk may pass without transfer, if the freight-cars are ventilated in such way that a constant current of air passes through the whole length of the car during transit. Way freight should be transferred at a point not exceeding 50 miles from the point of departure, and the cars from which such freight has been transferred shall not proceed further on the road, but shall be returned to the city.

After considerable debate upon the principal points of the proposition, it was unanimously adoped.

The next proposition was at first presented by the committee in the form of an unanswered question. The sentiment of the council expressed itself on the proposition.

(*c*). Mails. The mail matter and mail-bags shall be heated to a temperature of 250 degrees Fahrenheit, or be otherwise disinfected, before they are sent from infected places by railway trains.

The proposition was then adopted. The next proposition presented to the meeting was:

(*d*). Whenever any case of yellow fever, or sickness suspected to be yellow fever, shall be found in New Orleans, or in any of the Gulf ports, the President of the State Board of Health of Louisiana, or the President of the Board of Health of such Gulf port, shall at once notify all the members of this

Sanitary Council of the Mississippi Valley by letter, giving the date and localities of such sickness. If the disease becomes epidemic, or spreads to such a degree as threatens to become epidemic, full information on all these points shall be given to the members of this council by the State Board of Health of Louisiana, or President of the Board of Health of any Gulf port.

This, the last of the propositions of the committee, was, after thorough discussion, adopted.

Dr. Wright then proposed the following resolutions:

Resolved, That the Secretary be and hereby is instructed to communicate to the National Board of Health and to all local boards of health in the Mississippi Valley a copy of the regulations adopted by this Association, with the request that the same be enforced so far as practicable and as existing laws will permit, to the end that uniformity of action may be secured.

Resolved, That the members of this Association hereby pledge themselves to use every effort, especially by petitions to Congress and State Legislatures, to secure necessary enactments when existing laws are not sufficient to enable health boards to carry out the provisions recommended.

Unanimously adopted.

Dr. Kedzie then moved that there be embodied in the series of propositions adopted the following:

During the existence of an epidemic of yellow fever the freight-cars, after unloading, shall be thoroughly cleansed by scrubbing and sprinkling with carbolic acid, or fumigated and disinfected, and then painted.

A plan—the arrangement of which had sometime ago been referred to a committee—was then adopted, securing co-operation between the National Board of Health, the Sanitary Council of the Mississippi Valley, and the American Public Health Association in collating knowledge of the actual sanitary condition of every city in the United States, particularly in the Southwestern States along the Mississippi River. It is designated to ascertain as far as possible everything that will tend to affect the sanitary condition, whether for good or evil, of the various cities—the systems of sewerage, the condition of vaults and the disposition that is made of refuse matter, and from these data to compile the best sanitary regulations and correct existing abuse. After adopting these measures the National Board of Health adjourned to meet in convention at Nashville on the 8th of November. From this it is not to be understood that the National Board of Health has literally adjourned until that date; they will, on the other hand, hold session during the entire summer. The stenographic report of the debates and the proceedings at this, the Atlanta convention, will be written out, and, together with the propositions reported to the Board by the Sanitary Council, will be thoroughly discussed. From these discussions will be ascertained, as far as possible, the best sanitary measures for the prevention as well as the eradication of epidemics; these results, when obtained, will be furnished to local and State sanitary bodies. Then, on the 8th of November, the Board will again meet in Nashville, there to hold a conference similar to the one just held in Atlanta, with leading sanitarians invited from every quarter of the Union. Should the Board obtain an appropriation of six hundred and fifty thousand dollars from Congress, as they desire, they would be enabled themselves to put into effect the results of their deliberations; but with their present means they can only accumulate knowledge, deduce sanitary measures from it, and refer them to local and State authorities to be put into effect.

The Sanitary Council of the Mississippi Valley and the American Health Association have agreed to meet in Nashville, also, on the 8th of November.

[For facts, etc., we are largely indebted to the reports printed in the *Constitution* of Atlanta.—Ed.]

American Medical Editors' Annual Meeting.

This gathering took place in Atlanta, Ga., May 5th. The representatives of fourteen medical journals were present. The President's address, by Dr. Brodie, was in the main a presentation of his views upon medical journalism, its history, scope and duty. In general the address may be said to be characteristic of its distinguished author. He declared that the advertisements of patent medicines in medical journals should be regarded as a violation of the code of ethics, and recommended that an expression of opinion on this point be obtained from the American Medical Association. The address was quite freely discussed. Then a conference followed upon some methods for enlivening the annual meetings of the Association.

Action was taken upon the death of Drs. J. Hayes and Thos. Waddel.

Drs. Davis, Parvin, and Reynolds were appointed a committee to consider methods for making the Association more effective.

Officers for the ensuing year are: President, Dr. Thos. S. Powels, of the *Southern Medical Record;* Vice President, Dr. Frank Woodbury, of the *Boston Medical Journal.*

The Association was handsomely entertained by Dr. Powel, at a dinner given to its members.

Michigan State Board of Health.

The regular meeting of the State Board of Health was held in Lansing, on Tuesday, April 8, 1879. The following members were present: Dr. R. C. Kedzie, Hon. Le Roy Parker, Rev. D. C. Jacokes, Dr. H. O. Hitchcock, and Secretary Henry B. Baker.

President Kedzie stated that on account of ill health, and business connected with oil matters, he had been unable to prepare his annual address.

By a vote of the Board, he was requested, if convenient, to make his annual address on the subject of the history of legislation relative to illuminating oils in the State of Michigan. The motion also included a request to have, in condensed form, the main facts bearing upon the dangers in the use of kerosene oil.

Dr. Kedzie was unanimously re-elected President of the Board for the ensuing two years.

SLAUGHTER-HOUSES.

Dr. Kedzie presented the subject of slaughter-houses in towns and rural districts, and read a letter from F. Andrews, of Dowagiac, relative to slaughter-houses in his vicinity. Dr. Kedzie referred to the rules which he had prepared for the government of slaughter-houses in the township of Lansing, and suggested the desirability of butchers uniting in one house in cities of even the size of Lansing, for greater ease of methods, for cleanliness and sanitary arrangement.

Referred to a committee for investigation and report. This committee is also expected to prepare a model set of rules for the regulation of slaughter-houses.

DEATH OF REV. MR. BRIGHAM.

The Secretary announced the death of Rev. C. H. Brigham, a former member of the Board, and proper resolutions of respect to his memory were passed.

NEW LEGISLATION.

The Secretary also announced the passage, by the present Legislature, of three new laws which will tend to promote the public health in this State and increase the efficiency of local boards of health. Of these laws, one provides that the council of each city and village shall constitute a Board of Health, unless there is other provision by special law, so that hereafter there is to be a local Board of Health in every township, village and city in the State; one law makes it the duty of health officers in cities and villages to notify the Prosecuting Attorney of any neglect by householders or physicians to report cases of disease dangerous to the public health; and one authorizes boards of health in cities, villages, and townships to furnish free vaccination to the inhabitants thereof. The Secretary is to prepare a circular to health officers in cities, townships and villages, calling attention to some of their duties under the new laws, and otherwise setting forth their duties as health officers.

The Board adopted a resolution tendering a hearty vote of thanks to Congressman McGowan for his labors in procuring the passage of the bill which has recently become a law, establishing a National Board of Health.

COMMUNICATIONS were received from Hon. C. D. Randall, of Coldwater, suggesting the propriety of the selection of healthy locations and the determining of plans and specifications for all new State institutions by the Board of Health, and that all systems of drainage, sewerage, etc., in public buildings hereafter to be erected, should be approved by the State Board of Health previous to their adoption.

Also, from J. A. Russell, M. D., of Edinburgh, Scotland, setting forth a plan for a mutual sanitary protective association for cities, accompanied with a leaflet, giving the plan adopted in that city.

Also, from the National Educational Bureau at Washington, inclosing a note from Wm. M. Evarts, Secretary of State, giving notice of a prize of £100 offered by the Royal College of Physicians of London for the best essay on hydrophobia, its nature, prevention and treatment.

Also, a communication from B. B. Ross, of East Saginaw, suggesting that health officers ought to visit all cases reported as dangerous to the public health and verify the diagnosis of the attending physician. He thought this would improve the accuracy of the weekly reports of diseases by Health officers.

The communication was referred to the Committee on Legislation, as was also a suggestion by Dr. Baker, that the Health Officer should be authorized to act promptly for the restriction of such diseases, if found to be correctly reported.

Another communication on the same subject, received from E. S. Richardson, M. D., was referred to the same committee.

OVERFLOWED OR SATURATED LANDS.

At the afternoon session Dr. Lyster was present, and presented an article, portions of which he read, relative to the reclamation of overflowed or saturated lands. Reference was made to large tracts of land on the Crapo farm, the Chandler farm, and near Detroit, and descriptions given of the methods adopted and their results. It also included a record of experiments made for the past twenty years in a large tract of country near Bordeaux, France, translated from a French report. This paper showed the great importance of the work, both pecuniarily and as directly related to health. The original French paper was illustrated with a diagram, showing the relations of the birth-rate to the death-rate as connected with this process of reclamation. It showed an increase of the birth-rate over the mortality until the Franco-Prussian war.

In the discussion which followed, Dr. Kedzie referred to a paper by Judge Albert Miller, of Bay City, on the same subject, giving his experience in the Saginaw Valley, where he is reclaiming a section of very valuable land by protecting it with dykes, pumping the water out with steam pumps, and then keeping down the leakage by means of wind-mills. He received the thanks of the Board for his paper, and was requested to extend his investigations far enough to include the inspection of overflowed lands in Gratiot county and some other portions of the State, and report upon them, together with recommendations as to what ought to be done.

Dr. Lyster also reported having prepared, by request of the Board, the draft of a plan for a circular on the subject of house-drains and public sewers. The circular is to be studied and elaborated by each member of the Board before it is printed and sent out.

Dr. Kedzie said he wished to give an additional point to be considered in testing tin utensils for the presence of lead. His method heretofore published, as thus modified, would be to moisten the tin with nitric acid over a space the size of a dime, dry thoroughly, place thereon a drop of water and then a drop of iodide of potassium. If the tin is adulterated with lead the spot will assume a yellow color.

DEATH-RATE IN THIS STATE.

In reply to a question as to the death-rate in this State, whether increasing or decreasing under the enlarged sanitary work in the past, Dr. Baker said it was difficult to speak as regards the whole State, but he brought forward a statement received from Dr. W. H. Rouse, a correspondent in Detroit, giving the total interments in that city since 1873, whereby it appears that while the number of inhabitants has been constantly increasing, the number of interments has been constantly decreasing. The figures given were as follows: Interments in 1873, 2,506; in 1874, 2,386; in 1875, 2,321; in 1876, 2,317; in 1877, 2,105; in 1878, 1,909. He gives for the years 1876–7–8 the number of deaths from each cause, whereby it appears that the decrease has been in certain preventable diseases, rather tending to show that the sanitary work at Detroit, in perfecting the water-supply and otherwise has resulted in lessening the death-rate. In one instance it is almost certain that the lessening of deaths has come from vaccination. In 1877 there were 107 deaths from small-pox, and vigorous efforts were made for a thorough vaccination throughout the city. In 1878 not a single death was reported from this cause.

NEW LEGISLATION.

Hon. LeRoy Parker, from the Committee on Legislation, reported having prepared various bills which had been brought before the Legislature, three of which had become laws. One relative to an improved system of holding coroners' inquests, and another, in which he had acted with the Secretary of the Board, in reference to an improved method of collecting vital statistics, are now before the Legislature.

The memorial for a sanitary survey had been delayed, owing to lack of time and the difficulty of getting the matter properly before the Legislature. Mr. Parker and Dr. Baker recommended that the details of a plan be worked out in the Board before presenting it two years hence for legislative action; and that there be a committee on sanitary survey, charged with the preparation of schedules for such survey, to which committee all papers or suggestions relating to the subject should be referred. A Committee of three was appointed.

This was the meeting for the re-organization of committees; but as there are vacancies in the Board the subject was postponed until the July meeting. A large portion of the work of the Board is assigned to committees, and as communications come to the Secretary they are forwarded to the proper committees for action During the quarter, communications had been received and referred to committees, as follows:

To Homer O. Hitchcock, M. D., (1) a postal from W. W. Switzer, M. D., relative to three cases of typhoid fever caused by use of bad water; (2) a letter from S. P. Gray, relative to sawdust and mill-refuse in streams; (3) a letter from J. D. Johnson, sending a petition against allowing sawdust, etc., to flow into the lake; (4) a letter from C. W. Marvin, M. D., being a study of an outbreak of diphtheria in Gratiot county.

To Henry F. Lyster, M. D., (1) a letter from Josiah Miller, relative to flooding Chippewa river for driving logs; (2) a letter from Daniel F. Swain, of Hungerford, relative to cutting away a dam; (3) a letter from W. F. Jenison, of Eagle, relative to drainage, etc.; (4) a letter from J. Van Zandt, relative to the dam on Lincoln Lake.

The Secretary having made experiments and had some correspondence on the subject of illuminating oils, was requested to turn over to Dr. Kedzie, if he desired it, all correspondence in relation to that subject.

EXAMINATIONS IN SANITARY SCIENCE.

Dr. Lyster made a report on the proposition, originally made by him, that the Board shall offer to examine candidates in sanitary science and its different branches, recommending that the board make preparations for examinations by its different committees on subjects assigned to them, and that certificates be given to those who ask for and sustain examinations. It was thought that the publication of the examination papers would tend to increase the interest and knowledge concerning the subject among the people generally; and that the examination would tend to secure throughout the State a class of physicians especially intelligent on the subject of sanitary science, and the public could have proof of their qualifications by means of these certificates. If the people see fit to select such persons for health officers, it would react well on the interest of public health, which it is the duty of the Board to promote.

Dr. Baker favored it, and suggested that schedules of questions in each of the several branches of sanitary science be prepared for this purpose. The Secretary was directed to procure copies of the examination papers in sanitary science from different colleges in foreign countries.

SANITARY CONVENTIONS.

A communication was received from Dr. Peters, of Tecumseh, inviting the Board to hold a convention at that place. The Board voted to hold two public sanitary conventions next winter, and each member pledged himself to make them a success. It is desired to procure at these meetings the greatest collection of sanitary utensils which can be obtained, from a common pie-dish to the most elaborate apparatus for heating and ventilation. The time and place for holding such convention will be announced as soon as determined; and it is hoped that dealers in sanitary appliances will exhibit their wares and describe their uses and advantages.

Drs. Hitchcock, Lyster, and Baker were appointed a committee to prepare for the details of these sanitary conventions.

The Secretary presented a report of work done in the office during the quarter. It included the distribution of over 1,000 copies of the Sixth Annual Report; the printing, addressing, and mailing of about 2,500 blanks for return of annual reports of health officers and clerks of local boards of health, a large number of which had been received, examined and filed. Circular 29, relative to diseases in Michigan in 1878, had been sent to each correspondent, and replies from twenty-six persons had been received, examined and filed. Meteorological observations had been taken at the office during the quarter. Meteorological registers, and reports of disease had been received from observers, to whom, also, the regular distribution of blanks had been made. Work had been done in compiling the weekly reports of diseases, and the meteorological registers for 1878. The correspondence and the routine work of the office had been fully up to the average.

ANNUAL REPORTS OF HEALTH OFFICERS.

The subject of annual reports of health officers and clerks of local boards of health was discussed. It is found difficult to compile these reports in a satisfactory manner by counties, because in many cases one or more townships are not represented by reports. Some officers fail to report, because no reports are made to them; though one effort of the State Board is to learn just such facts as the probable extent of delinquencies in the reports of physicians and householders.

The next regular meeting of the Board will be held July 8.

Meeting of the Northwestern Ohio Medical Association, at Tiffin, Ohio, May 1st and 2d, 1879.

This Association, now numbering about two hundred and fifty members, and almost the peer of the State Society, was called to order at 1.30 o'clock P. M., by the President, Dr. Asa Brayton, of Carey, O. Dr. Wm. Jones offered prayer. Dr. McFarland read an address of welcome. The minutes of the last meeting were read and approved.

Dr. W. T. Ridenour, of Toledo, gave a written report of an operation for ovarian tumor. The result was a success.

Dr. G. A. Collamore, of Toledo, made a written report of a case of meningeal hemorrhage, which terminated fatally. The post mortem revealed a syphilitic crasis or origin.

Dr. L. S. Thorn, of Toledo, read an obituary on the death and eminent professional abilities of Dr. Thomas Waddel, late of Toledo.

Dr. P. H Brooks, of Lima, read a paper on the transmission of disease from father to child through the spermatozoa. This paper will be published and will speak for itself. Suffice it to say that it was remarkable for its philosophical reasoning, originality of thought, and shrewd deductions and conclusions.

Dr. A. Wangaman, of Tiffin, read a paper on "Some Evils in School Life." It was apparent that the author had given the subject of errors and abuses in the management of common schools, in a hygienic and moral point of view, close scrutiny and practical observation.

Dr. Wangaman was requested to continue his investigations in this well-chosen field.

In the evening Prof. M. C. Cuykendall, of Bucyrus, delivered a popular address on the " Facial Angle ; Is it an Indicator of the Intellectual Capacity ? " A number of practical illustrations were made to prove that the facial angle is an indicator of intellectual capacity.

After the lecture the profession of Tiffin entertained the members of the Association at Grammes' dining hall in a manner that showed themselves to be possessed of the broadest liberality and devoid of all selfishness.

MAY 2d, 9 o'clock A. M.

The Association was called to order. Lima, O., was selected as the place for holding the next regular meeting. Time, December 4th and 5th, 1879.

Delegates were chosen to represent the N. W. O. M. Association, at the State Medical Society, June 3d to 6th next.

Dr. F. W. Firmin read a paper on "Pelvic Hematocele," including a report of a case.

Dr. J. Bland, of Poplar, read a paper on " Ante-flexion of the Uterus."

Dr. A. S. Williams, of Fostoria, read a report of some cases in practice of " Obstructions in the Rectum."

Dr. Willard, of Tiffin, read a paper on "Prophylaxis in Medicine."

The foregoing papers were generally meritorious, some of them, as already observed, especially so; but it is not the province of this report to discuss the points of merit or the defects of the individual papers. They received at the hands of the Association a pretty thorough dissection.

About sixty physicians were present, a majority of whom took a lively interest in the meeting.

The election of officers for the ensuing year resulted as follows: President, Dr. D. H. Brinkerhoff, Fremont; First

Vice President, Dr. E. J. McCullom, Tiffin; Second Vice President, Dr. F. W. Firmin, Findlay; Secretary, Dr. A. N. Krout, Van Wert; Assistant Secretary and Treasurer, Dr. R. E. Jones, Gomer.

The usual committees and essayists were appointed for the next meeting, and the Association adjourned.

A. N. KROUT, M. D.,
Secretary N. W. O. M. A.

The Detroit Lancet.

LEARTUS CONNOR, A. M., M. D., EDITOR.

The Late National Medical Association Meetings.

Yearly these meetings increase in power and influence, so that now but few hold them in derision—none that have ever attended and caught their spirit. Nowhere else is it more true that in united effort there is strength. Here there is provision for the body, the mind and social nature. That delegate must be very obtuse that in one or all of these regards does not feel himself wiser and stronger. In other columns we have given the general features of each meeting. It will be seen that the American Medical College Association has more firmly established itself in the confidence of the colleges; that it has demonstrated its ability to enforce its requirements of its members. The invariable testimony of college members shows that the practical workings of the Association have been good and good alone. The observance of its provisions has increased the administrative and educational efficiency of most schools and swelled their financial returns. The correction of past abuses and the firm adherence to published statements has rendered it easier and more agreeable to conduct the business of the several institutions. By fair, equitable dealing with each other according to the organic laws laid down in its constitution, by-laws and articles of confederation, a degree of confidence in each other has been developed among its members that was hitherto unknown. As this organic law can only be changed after the fullest consideration, no prejudice, or envy, or hatred can suddenly work injury to any college or colleges. Outsiders may think that because its movements are slow, therefore it is a nonentity. This arises partly from the fact that such persons have not taken the trouble to examine its organic law and compare it with the announcements of the several colleges. Such comparison would convince any candid mind that but few of the colleges out of the Association have requirements equal to those of the Association. Again, the grumblers generally have some one idea in mind, and, if this be left unconsidered, then there is no advance.

If all matters pertaining to medical colleges are remembered, and these compared with the work of the Association, it will be seen that this body is a power in medical education such as never before existed in America. To bring vast corporations into a harmonious working with one organic law is a task requiring time. The College Association has made a progress in this respect far exceeding the most sanguine anticipations of its friends. Having corrected vast and flagrant abuses in medical education, and in the conduct of medical schools; having become somewhat accustomed to the workings of its rules of organization; having established a firm bond of mutual confidence among its members, the American Medical College Association now takes the first steps towards requiring of its members, as one of the conditions for conferring the degree of M. D., three courses of lectures in three separate years. We are confident that this amendment will be adopted next year and become a fixed law. The Association showed that it would advance just as fast as it could carry with it the majority of its members.

All present at the Atlanta meeting feel assured, as never before, that the Association is surely gaining ground, and that, in the not distant future, it will constitute the one power guiding and controlling American medical education. So quietly and unostentatiously has it organized and grown that those who measure power by the noise it makes are liable to be deceived in their estimate of this Association.

Of the Medical Editors' Association, excepting the admirable address of our venerable townsman, Dr. Brodie, it can scarcely be called other than a farce. Its one redeeming feature consists in its introducing to one another such editors as attended the other medical gatherings.

The meeting of the American Medical Association as a whole may be called a success. Everything passed off smoothly. The intellectual feast in some portions was ample, and in others rather thin. But this only illustrated the universality of the provisions—meat for strong men and milk for babes. All the sections did some excellent work, and some very superior. The social features were unrivaled, and did infinite service in bringing members into a friendly relation to each other. The election of Dr. L. A. Sayre, as President, and appointing the next place of meeting at New York City, seemed to many as unfortunate. Possibly these may prove mistaken, and the next gathering of the Association prove a success beyond the fondest hope of the most sanguine. Be this as it may, the Association will quietly persue its beneficent career and abundantly reward all such as through its agencies seek their own good in that of the general profession.

Of the meeting of the National Board of Health little need be said. A council of medical solons, under national authority, congregated to discuss the best mode of preserving the nation from plagues and pestilential diseases, is a spectacle that speaks volumes for the future prosperity of the nation. From these discussions a new basis is made for further advances, and in due time we shall have a practicable method of warding off those disorders that threaten the nation's life. Thus, in these meetings, the East and West, North and South, town and country, rich and poor, young and old, have met, joined hands and contributed each his part toward the advancement of medical science and art. Narrow views have been broadened, shallow ones deepened, crooked ones made straight, wrong ones corrected and hazy ones made clear. In these and countless other ways the great heart of the American medical profession has been stimulated to a more vigorous, healthful activity.

Coroners' Inquests—Proposed Change in the Laws.

A bill has been introduced to the Michigan State Legislature radically changing our laws respecting coroners' inquests. On previous occasions we have pointed out the desirability of some change, in the interests of all concerned. It is notorious that rarely are these inquests so made as to supply the evidence needful to clear the innocent of taint or convict the guilty. To the profession they are absolutely valueless, because made by the incompetent and careless. The bill alluded to provides that all coroners shall be learned physicians, and shall be paid a definite sum for their services. The other sections provide the classes of persons that shall be thus examined, and the methods of procedure in each class.

In cases in which death by violence of another person is suspected, the prosecuting attorney of the county and justice of the peace are notified, and the justice shall hold an inquest, fully investigating all the legal features of the case. We hope the bill may become a law, as it would work to the advantage of science, justice and humanity. Physicians who have an influence with members of the Legislature would do well to exert it to the utmost *just now.* Should it fail this time, let us keep at work and have things in order for next session.

Statistics of Births, Marriages and Deaths—Bill to Improve their Collection in Michigan.

One of the most important bills presented to our Legislature related to improvements in vital statistics. Every one knows that there are no accurate statistics on these matters in our State. What knowledge we have is almost wholly based upon estimates. The bill before us is a well-considered effort to provide for the reasonably accurate collection of vital statistics. It provides that the health officer of each town shall, with proper assistants, register the statistics of his town. The reports for each year of births and deaths must be made by the first day of March of the following year. One copy of this report shall be sent to the Secretary of State, and one to the County Clerk of the town. Each person solemnizing a marriage shall record in the County Clerk's office all the facts pertaining thereto, as the christian name and surname of the bridegroom and bride, and the maiden name of the bride, if a widow, the color, age, and place of birth of each, the residence of each at time of marriage, the occupation of the bridegroom, the name and official station of the person by or before whom they were married, the names and residences of at least two witnesses present at such marriage, and the date when such record was made. These records must be transmitted by the County Clerk to the Secretary of State on or before the first of May.

Fines and other penalties are provided to enforce the provisions of this act. Every facility is afforded all for the easy performance of their several duties in making the needful reports.

At date of writing it seems scarcely probable that this bill will pass the present Legislature. But physicians will do well to discuss the matter as to the best means of securing the desired end. Having satisfied our own minds let us endeavor to convert those with political influence, and so to procure the needful change.

Memoranda.

The *Medical Press and Circular* reports an extraordinary case, observed by M. Lefebore, at Ceberpullen, Luxemburg. A female child was born, very fully developed, having hair on the pubis. She menstruated at the age of four and became pregnant at the age of eight. The pregnancy terminated by the expulsion of a mole containing a well characterized human embryo.

There are but two authenticated cases in which the eyes were devoid of irregular astigmatism. One of these is reported by Humboldt, and one by Landolt. To these persons stars appeared as luminous points without rays.

In the proof reading of this volume, and the preparation of the index, we desire to acknowledge the skilled and faithful services of Dr. Albert B. Lyons.

Dr. Louis Elsberg, 614 Fifth avenue, requests that those who have contributed to the literature of the throat, voice, etc., will send him copies of their articles, or the titles, etc.

The Pennsylvania State Legislature has again failed to form a State Board of Health.

The last surviving officer of the U. S. Pharmacopœia Convention of 1870, Dr. Jas. E. Morgan, has issued a call for a sixth decennial general convention, to be held in the city of Washington, May, 1880, for the purpose of revising the U. S. Pharmacopœia. Delegates are to be sent from State medical societies, medical colleges, and colleges of pharmacy.

On page 303 of the DETROIT LANCET, read Medical Department of the City of *New York* instead of *Newark*.

We learn that Dr. A. B. Palmer intends to soon visit Europe for the collection of materials to complete a work upon the theory and practice of medicine.

The fourteenth annual meeting of the Michigan State Medical Society will be held at St. Andrew's Hall, Detroit, June 11th and 12th. The Michigan Central, the Detroit, Lansing & Northern, the Grand Rapids and Indiana, and the Detroit, Grand Haven & Milwaukee Railroads will sell round trip tickets at two cents per mile each way, on presentation of the required certificate of identification. If early application is made, Dr. Geo. E. Ranney, the Recording Secretary of the Society, will send such certificates to all physicians desiring them, who may wish to travel over one or more of these roads in going to and returning from this meeting.

The conjunction of Jupiter, Uranus, Saturn and Neptune, at their perihelion, occurs in 1880. It is predicted that from that time till 1885 we shall suffer extreme vicissitudes of weather, deluges followed by droughts, causing failure of crops, famine and pestilence.

Dr. L. P. Blackburn has been nominated by the dominant party for the next Governor of Kentucky. It is said that the cause of this move was his heroic service to the sufferers from yellow fever last year. No doubt is entertained of his election.

The *Medical Herald* is the title of a new medical journal published and edited at Louisville, Ky., by our energetic friend, Dr. Dudley S. Reynolds. It contains forty-eight double-column pages and is issued monthly at $2.50 a year. The object of its editor is "to make it so respectable in tone, so popular in character and so successful in a business way as to create a necessity for its perpetuity." With four regular medical colleges and four regular medical journals, Louisville may well be content. We bespeak for the *Herald*, the latest born, the kindly consideration of the reading profession.

An effort is being made to organize, in Philadelphia, a society called the "Academy of Surgery." The membership is to be limited, and no specialist need apply. An effort is also being made to organize an "American Surgical Society," whose membership shall be limited, and to which no specialist can be admitted.

The Richmond and Louisville *Medical Journal*, May, 1879, says that physicians should affiliate as much as possible with their homœopathic brethren, visit them in their homes and in their offices, call them in consultation where practicable, and make an effort to force into contrast when opportunity presents the different procedures. It would also be wise for physicians to make themselves acquainted with the doctrines taught in homœopathic colleges, and to keep constantly on hand, a case of homœopathic specifics. It pains us to doubt the sanity of a brother editor, but the above quotations are certainly ominous of cerebral instability.

The American Laryngological Association will hold its first annual meeting in New York City, June 10th, 11th and 12th. From the programme we observe that fourteen papers are to be read by members, and three by applicants for membership. With these men, and these subjects for their papers, as here detailed, the meeting cannot fail to be one of unusual interest—

worthy of the projectors of the Association. Our friend, Dr. Shurly, of Detroit, is to read a paper upon the galvano-cautery in the treatment of diseases of the nose and pharnyx.

Dr. Chas. Murchison, of London, England, died suddenly April 23d, from chronic heart disease. He is perhaps best known in this country by his writings on the "Functional Derangements of the Liver." It is said that he contributed 311 papers to the London Pathological Society. Of his work on "Continued Fevers of Great Britain," his translation of "Frerich's Diseases of the Liver," and his numerous articles in the medical journals, we have not space to speak. Enough has been said to indicate his indomitable energy and unceasing industry. Let those who excuse idleness by saying that they have no time to *write*, ponder the record of London's most active practitioner.

Prof. Starling Loving, M. D., of Columbus, Ohio, sends us the following, with the remark that he has every reason to believe that it gives the correct composition of a famous nostrum:

LONDON CHLORODYNE:—

℞ Sulphate of Morphine, sixteen grains.
Extract of Cannabis Indica, thirty-two grains.
Chloroform, two and-one-half fluid drachms.
Oil of Peppermint, forty-eight drops.
Oil of Capsicum (Capsicin?), sixteen drops.
Simple syrup, to make eight fluid ounces.
Mix.—Bottle to be shaken occasionally.

Editor's Book Table.

Stille and Maisch's National Dispensatory.*

This long-needed work is before us. For years its authors have been at work collecting, assorting and condensing the crude material. It was very fortunate that two men so able for this special work were induced to undertake it. Wood's

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*THE NATIONAL DISPENSATORY: Containing the Natural History, Chemistry, Pharmacy, actions and uses of medicines, including those recognized in the pharmacopœias of the United States and Great Britain. By Alfred Stillé, M. D., LL. D., and John M. Maisch, with 201 illustrations; pages 1628. 1879. Philadelphia: Henry C. Lea. Cloth, $6.75; sheep, $7.50.

Dispensatory was sadly out of date, utterly failing to meet the wants of either physician or pharmacist. For these this work was prepared. It "aims to present a concise but complete statement of all that is of practical importance to both professions—a digest in which that which is old and that which is new shall be so brought together as to give the reader, within the most moderate compass, all the details in pharmacology, pharmacy, and therapeutics which he is likely to need in his daily avocations. The effort has been to make a work to which the inquirer may refer with certainty of finding everything which experience has stored up as worthy of confidence in the subjects within its scope." We find included all the crude drugs and chemical and pharmaceutical preparations officinal in the pharmacopœias of the United States and Great Britain; also the more important medicines of the French Codex and German Pharmacopœia, and a large number of drugs often kept in the shops to supply local needs. The arrangement adopted is alphabetical, so that any article is found with the greatest ease.

We are glad to notice that detailed botanical descriptions are not given. As a feature, novel in a dispensatory, we find a succinct account of the physiological action of medicines. Further, when possible, the results of physiological experiment have been applied to therapeutics. The authors admit that a scientific explanation of the curative powers of medicines must be sought in the results of their experimental operation upon the animal functions. In therapeutics, the most reliable results of clinical experience are concisely given.

There are two indices—the usual one, and a therapeutical one.

It is interesting to observe the list of remedies thus shown to have been employed in the treatment of certain diseases. Being really a therapeutical classification of medicines, it is very suggestive. Some 200 illustrations are introduced into the text. In the brief appendix we find a table of doses, details respecting the metric system, weights and measures, list of re-agents, and table of equivalents. As a whole, and as individual parts, this book is worthy of all commendation, as contributing to advance the interests of both pharmacists and physicians. Honest, capable work is everywhere apparent. By it scattered fragments are gathered up and placed in a fixed shape, convenient for daily use, by other than professors and scholars. There is probably no compiled work of the present day that will exert a greater influence in the professions. The publisher has issued it in the most durable and attractive style.

Wood on Therapeutics, Etc.*

Of the varied fields in medicines, probably none shifts more rapidly, during the present era, than that of therapeutics. Related on the one hand to chemistry, organic and inorganic, and pharmacy, and on the other to physiology and pathology, it speedily reflects in a magnified form all important advances in those sciences. Of late the physiological action of remedies has been a favorite study by a great many competent observers. As to the value of these researches, the most skeptical admit that in no other way can we attain a scientific explanation of clinical facts. To collect these researches and place them in their proper relations, was the mission of the first edition of this work, and succeeding editions have enabled the author to so modify it as to correctly represent the varying phases of advancing knowledge. Three editions in so short a time prove the estimate in which the profession hold it. While rivals have entered the same field, in many respects this remains superior to all. With the new National Dispensatory, the elaborate work of Stillé, the briefer one of Biddle, the larger one of Barthelow and of Wood, the United States may fairly claim for itself the best works on materia medica and therapeutics. With our national characteristic of taking the most direct route in the attainment of our ends, we may now believe that in the future we shall continue to produce the best text books on this subject.

*A TREATISE ON THERAPEUTICS, Comprising Materia Medica and Toxicology, with Special Reference to the Application of the Physiological Action of Drugs to Clinical Medicine: By H. C. Wood, Jr., M. D. Third edition, revised and enlarged. 1879. J. B. Lippincott & Co., Philadelphia. Price, cloth, $6.00; sheep, $6.50.

Chemical Physiology and Pathology—Vaughan.*

This little work claims only to be the lecture notes of a teacher of chemical physiology and pathology. These notes have been made from a study of the eminent workers in this field. In their passage through the writer's brain they are more or less modified, and with occasional additions or subtractions as would be natural to any independent thinker and worker. We doubt not that the work is of great value to the author's students, and to such other students as have teachers pursuing similar methods. Generally, chemical physiology is taught in connection with experimental physiology, and physiological anatomy and histology. Altogether these are concerned in what we call vital processes. But it may be that, as many think, it is better to teach the various parts separately. In accordance with his plan, the author has made an excellent work, accurate and readable. We have read it with much interest, and can commend to all desiring a clear statement of our knowledge on these subjects.

Tellor on Diseases of Live Stock.†

This is intended to be a plain description of the diseases to which horses, cattle, sheep and swine are subject, and the best treatment for the same. The author was brought up on a farm, and has practised medicine in a rural locality. In this way, being often consulted respecting diseases of these animals, he secured the best works on the subject. Combining these with his experience, he has prepared this volume in the hope that it may be of service to those having the care of these animals, and particularly to those situated as he was. From our examination we can say that the volume is carefully prepared and admirably adapted for the purpose designed. It is well printed, on good paper, reflecting credit on its publisher.

*LECTURE NOTES ON CHEMICAL PHYSIOLOGY AND PATHOLOGY: By Victor C. Vaughan, M. D., Ph. D., Lecturer on Medical Chemistry, University of Michigan. Second edition, revised and enlarged. Cloth; pages 315. 1879. Ann Arbor: Ann Arbor Printing Co.

†THE DISEASES OF LIVE STOCK AND THEIR MOST EFFICIENT REMEDIES: By Lloyd V. Tellor, M. D. Cloth; pages 469. 1879. D G. Brinton, 115 South Seventh street, Philadelphia. Price, $2.50.

Clinical Diagnosis.*

The diagnosis of disease at the bedside is a subject of perennial interest. Undoubtedly more medical men fail in this than in all other points. So vast are the fields of research connected with the normal structure and function of every portion of the body, and with the various degrees by which this structure and function become abnormal, that the student, and too often the practitioner, is unable to so sift it as to bring to bear upon any particular case just that knowledge that shall unravel its perplexities.

Here perception, memory, reasoning and judgment, all have opportunity for their fullest activity. The work before us is designed "to give some assistance in the clinical study of the signs and symptoms of disease by supplying carefully selected data in a condensed form, by submitting accurate methods of investigation, by pointing out probable fallacies and by directing attention to collateral inquiries or issues which might otherwise be readily overlooked by the inexperienced." Its several chapters are prepared by different authors especially familiar with the clinical diagnosis of the disorders discussed. Thus Dr. W. T. Gardiner contributes the article on "Physiognomy of Disease;" Dr. James Finlayson on "Case-taking, Family History and Symptoms of Disorder in various Diseases;" Dr. Wm. Stephenson on "Disorders of the Female Organs;" Dr. Alexander Robertson on "Insanity;" Dr. Samson Gemmell on "The Sphygmograph and the Physical Examination of the Chest and Abdomen;" Dr. Joseph Coats on "The Examination of the Fauces, Larynx and Nares, and on the Method of Performing Post Mortem Examinations." We have read the various chapters with interest, and hesitate not to affirm that there are few practitioners, and no medical students, who would not be greatly profited by their careful study. Largely the scope of the work is unique, in that it occupies a medium position between those works that give the merest skeleton and those that are extremely elaborate. The opening chapter on the physiognomy of disease is concise and yet graphic. Generally, we are inclined to the belief that too little is made of this topic by students, and even practitioners. Speaking of diathesis, Dr. Gardiner remarks that the proof of its existence is a proof of disease, though it may be in its earlier manifestations and least notable forms. Every teacher will assent to this. "What has chiefly to be rooted out of the mind of the ill-informed or imperfectly trained clinical student is the impression that such conclusions are to be safely reached through mere phrases, appealing largely to the imagination, without minute and careful study of details. The popular, and to a certain extent, the half-educated medical mind is always looking for a pathognomonic sign, or a broad, striking, easy generalization from a few facts; whereas it is only by ripened experience that we come to know gradually the real value of common and obvious, still more of uncommon and not obvious, facts, *when seen in combination*, so as to form conjointly a basis for large inferences. Such a diagnosis, however, is often the result of the careful study of the *physiognomic* characteristics of individual patients."

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*Clinical Diagnosis—A Hand-book for Students and Practitioners of Medicine. Edited by James Finlayson, M. D., with eighty-five illustrations. Cloth; pages, 546; 1878. Henry C. Lea, Philadelphia. Price, $2.63.

In considering the physiognomy of corpulence, "it is to be remarked that the experience of years, and the critical appreciation of the human form under a great variety of conditions, normal or abnormal, gives to the physician, in many cases, a power akin to that of the artist, incommunicable by words—an instinct of divination, so to speak, by which the true character and the history of the organism may be read in the external features and physical characteristics; and this not only as to health and disease, but as to all the leading elements of character." He does not regard any amount of external fat beyond a fair average as advantageous to its possessor.

As senile decay begins, the embarrassment caused by an excess of rotundity is most apt to tell upon the constitution. Speaking generally, a moderate accumulation of fat up to the age of 40, or even 45, is wholesome rather than otherwise, and if associated with a broad chest, well developed and active muscles, an energetic character and a healthy respiration and circulation, will tend to long life, even if the digestion should be, as often happens, rather feeble. But increase of fat to a notable degree beyond the middle term of life, is always to be regarded with suspicion as implying a probability of vital and dynamic conditions of nutrition tending to precipitate the process of the senile decay. In persons of spare habit the following points require notice: The presence of "clubbing" of the finger-ends, or of undue curvature of the nails, the red line on the gums, said to be more or less characteristic of tubercular disease; the peculiar momentary starting and elevation of the skin produced by a tap of the finger point over the costal cartileges, and described as "myoidema;" any undue, and especially any unilateral flattening below the clavicles, or deformity elsewhere of the chest, and any inequality or want of symmetry in the respiratory movements; any rapid and too easy flushing of the face, and especially that limited flush of the cheek with pallid complexion generally which denotes fever in an exhausted constitution; any or all of these may, in particular cases, be valuable indications of truly morbid emaciation. In almost every serious disease of infancy and childhood, it is possible, by studying carefully the relation of the spontaneous movements to each other, and to the attitude and expression of the child, its cries, smiles, inarticulate noises, its color, state of general nutrition, behavior in sleep and in waking, to arrive at a reasonable and often a perfectly just conclusion as to the general nature and locality of the disease. The various other chapters are prepared with equal care and felicity. It is an admirable book in design and execution. Every student that is in attendance upon clinics or hospitals would act wisely in making it his constant companion until its contents are mastered.

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—A—

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DR. REDWOOD'S
Analytical Department.

I have examined the Extract of Malt manufactured by the "Trommer Extract of Malt Company," and judging from its physical characters and chemical reactions, I am of opinion that it fairly represents what its name indicates, that is, that it is a preparation of Malt in which are contained the essential properties of that substance, with a slight addition of Aromatic Bitter of the Hop. It has the character of a soft Extract, in the sense in which that term is used pharmaceutically, and it has evidently been prepared with great care and judgment, as it retains the property of acting on amylaceous bodies, as diastase does, while the Extract itself bears long keeping without change.

It also possesses the property of forming, with Cod Liver Oil, a permanent Mixture or Emulsion, in which the taste of the oil is very effectually covered, and its administration thus greatly facilitated.

T. REDWOOD, Ph. D., F. R. C. S., &c.,
Professor of Chemistry and Pharmacy to the Pharmaceutical Society of Great Britain.

TROMMER'S EXTRACT OF MALT.

The rapidly increasing demand for our Improved Extract of Malt, during the four years that it has been manufactured and offered to the medical profession in America, justifies the belief that in its production here we are meeting a generally felt want.

Long experience in manufacturing Malt Extract has enabled us to completely overcome the many difficulties attending its manufacture in large quantity; and we positively assure the profession that our extract of Malt is not only perfectly pure and reliable, but that it will keep for years, in any climate, without fermenting or molding, and that its flavor actually improves by age. Our Extract is guaranteed to equal, in every respect, the best German make, while, by avoiding the expenses of importation, it is afforded at less than half the price of the foreign article.

The Malt from which it is made, is obtained by carefully malting the very best quality of selected Toronto Canada Barley. The Extract is prepared by an *improved process*, which prevents injury to its properties or flavor by excess of heat. IT REPRESENTS THE SOLUBLE CONSTITUENTS OF MALT AND HOPS, viz.: MALT SUGAR, DEXTRINE, DIASTASE, RESIN and BITTER OF HOPS, PHOSPHATES OF LIME and MAGNESIA, and ALKALINE salts.

Attention is invited to the following analysis of this Extract, as given by S. H. Douglas, Professor of Chemistry, University of Michigan, Ann Arbor:

TROMMER EXTRACT OF MALT CO.—I inclose herewith my analysis of your Extract of Malt:

Malt Sugar, 46.1; Dextrine, Hop-bitter, Extractive Matter, 23.6; Albuminous Matter (Diastase), 2,469; Ash—Phosphates, 1.712; Alkalies, .377; Water, 25.7; Total, 99.958.

In comparing the above analysis with that of the Extract of Malt of the German Pharmacopœia, as given by Hager, that has been so generally received by the profession, I find it to substantially agree with that article.

Yours truly, SILAS H. DOUGLAS,
Professor of Analytical and Applied Chemistry.

This invaluable preparation is highly recommended by the medical profession as a most effective therapeutic agent, for the restoration of delicate and exhausted constitutions. It is very nutritious, being rich in both muscle and fat-producing materials.

The very large proportion of *Diastase* renders it most effective in those forms of disease originating in *imperfect digestion of the starchy elements of food.*

A single dose of the Improved Trommer's Extract of Malt, contains a larger quantity of the active properties of Malt, than a pint of the best ale or porter; and, not having undergone fermentation, is absolutely free from alcohol and carbonic acid.

The dose for adults is from a dessert to a tablespoonful three times daily. It is best taken after meals, pure, or mixed with a glass of milk, or in water, wine, or any kind of spirituous liquor. Each bottle contains 1¼ lbs. of the Extract.

Our preparations of Malt are for sale by druggists generally throughout the United States and Canadas, at the following prices:

EXTRACT OF	MALT,	*With*	*Hops (Plain),*	$1 00
"	"	"	*Pyrophosphate of Iron (Ferrated),*	1 00
"	"	"	*Cod Liver Oil,*	1 00
"	"	"	*Cod Liver Oil and Iodide of Iron,*	1 00
"	"	"	*Cod Liver Oil and Phosphorus,*	1 00
"	"	"	*Hypophosphites,*	1 50
"	"	"	*Iodides,*	1 50
"	"	"	*Alteratives,*	1 50
"	"	"	*Citrate of Iron and Quinia,*	1 50
"	"	"	*Pepsin,*	1 50

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Lacto-Phosphates prepared from the formula of DR. DUSART, of Paris.

COMPOUND ELIXIR OF PHOSPHATES AND CALISAYA,

A CHEMICAL FOOD AND NUTRITIVE TONIC.

PHOSPHORUS, a Brain and Nerve Food; LIME, an Excitant of Nutrition; IRON, a Blood-maker, and CALISAYA BARK, a Bitter Tonic for all Prostrate Conditions of the System.

This elegant preparation combines with a sound Sherry Wine percolated through Wild Cherry Bark and Aromatics, in the form of an agreeable cordial, 2 grs. Lacto-Phosphate of Lime, 1 gr. Lacto-Phosphate of Iron, 1 gr. of Alkaloids of Calisaya Bark, Quinia, Quinidia, Cinchonia, and 15 drops of free Phosphoric Acid to each half ounce.

In the various forms of Dyspepsia, resulting in impoverished blood and depraved nutrition, in convalescing from the Zymotic Fevers (Typhus, Typhoid, Diphtheria, Small-pox, Scarlatina, Measles), in nervous prostration from mental and physical exertion, dissipation and vicious habits, in chlorotic anæmic women, and in the stru-
[illegible] children, it is a combination of great ef[illegible] abil-

proper proportion of Hops, that has been for many years the standard medicinal nutritive employed by the medical faculty of Europe, and especially of Germany. Its value has been established by experience, and its use in the treatment of almost all forms of disease of nutrition is constantly extending. We shall continue to devote the most scrupulous attention to the maintenance of the reputation of our Malt Extract, by the careful selection of material and by unwearied personal attention to manufacturing details.

Attention is respectfully directed to the accompanying extract from Ziemssen, and also to our circular and testimonials elsewhere printed.

Very Respectfully,

TROMMER EXTRACT OF MALT CO.

From ZIEMSSEN'S CYCLOPÆDIA OF THE PRACTICE OF MEDICINE, Volume XVI, *page* 474.

" The Malt Extract prepared from Trommer's receipt is designed to fulfil much the same purpose as cod liver oil, carbo-hydrates (malt sugar, dextrin), taking the place of fatty matter. The simple (much or little hopped) and the Chalybeate form of Malt Extract are coming more and more into favor as substitutes for the oil; they are more palatable and more easily digested, and should, therefore, be preferred in the dyspeptic forms of anæmia. During the last few years Malt Extract has almost taken the place of Cod Liver Oil in the treatment of phthisis and other wasting diseases, at the Basle Hospital, and we have as yet found no reason for returning to the use of the latter remedy. The Extract may be given from one to three times a day in doses varying from a teaspoonful to a tablespoonful in milk, broth, beer, or wine."

FOUGERA'S

COMPOUND IODINISED

COD LIVER OIL.

The immeasurable therapeutic superiority of this oil over all other kinds of Cod Liver Oils sold in Europe or in this market. is due to the addition of IODINE, BROMINE and PHOSPHORUS.

This oil possesses not only the nourishing properties of Cod Liver Oil, but also the tonic, stimulant and alterative virtues of IODINE, BROMINE, and PHOSPHORUS, which are added in such proportions as to render FOUGERA'S COD LIVER OIL FIVE TIMES STRONGER and more efficacious than pure Cod Liver Oil.

Fougera's Ready-made Mustard Plasters

A most useful, convenient, and desirable preparation, always ready for immediate use. Clean, prompt in its action, and keeps unaltered in any climate, easily transported and pliable, so as to be applied to all parts and surfaces of the body. It is prepared of two strengths:—No. 1, of pure mustard; No. 2, of half mustard. Each kind put up separately, in boxes of 10 plasters. Price 40 cents.

Directions.—Dip the plaster, a minute or two, in cold water, and apply with a band.

FOUGERA'S IODO-FERRO PHOSPHATED

ELIXIR OF HORSE-RADISH.

This Elixir contains Iodine, Pyrophosphate of Iron, the active principle of anti-scorbutic and aromatic plants, and acts as a *tonic, stimulant, emenagogue,* and a *powerful regenerator of the blood.* It is an invaluable remedy for all constitutional disorders due to the impurity and poverty of the blood. One of the advantages of this new preparation consists in combining the virtues of Iodine and Iron without the Inky taste of Iodide of Iron.

Fougera's Compound Iceland Moss Paste

(Iceland Moss, Lactucarium, Ipecac, and Tolu.)

Used with great success against nervous and convulsive coughs, Whooping Cough, acute Bronchitis, Chronic Catarrh, Influenza, &c.

Wakefulness, Cough and other sufferings in Consumption, are greatly relieved by the soothing and expectorant properties of this paste.

E. FOUGERA, Pharmacist,
372 SEVENTH ST., BROOKLYN, L. I.
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To whom all orders sh[illegible] be addressed.
FOR SALE BY DRUG[illegible]ERALLY.

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Is one of the most important and useful discoveries of the age, but it is not (as certain dealers of bad faith pretend) a preparation that any one can make, for it is not manufactured with a mustard that every one can buy.

RIGOLLOT'S MUSTARD PAPER.

Is the invention of Mr. P. RIGOLLOT, who is the exclusive owner ; it is the only preparation which has been adopted by the civil and military hospitals and the armies and navies of France and England, and which has obtained a medal at the Centennial Exposition at Philadelphia. All other mustard plasters or leaves of whatever name, are but imitations of the original.

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Physicians will find it the most reliable sinapism, prompt and certain in its action, and will therefore always prescribe it. Every sheet in order to be genuine must bear the annexed signature of the inventor, P. Rigollot

Sold in tin boxes containing 10 sheets, also 25 and 100 sheets, by all respectable chemists throughout the world.

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The Albuminoid Ferruginous Principle of Blood.

HÆMOGLOBIN is the only physiological chalybeate. Associated as it is with the phosphates of the blood, it forms the most powerful of tonics, and at the same time a most nourishing food. It is especially useful in cases of *Anæmia*, *Chlorosis*, *Cachexias*, *Exhaustion* caused by excess of work, nervous debility, fatigue resulting from parturition and lactation. It replaces entirely liquid blood, which has been recommended and used with success in *Phthisis* and *wasting away*.

It is offered in two forms: In cachets (wafers), 60 of which are contained in a box; combined with chocolate in small squares, 30 of which are in a box; both forms can be sent by mail.

Prepared by C. CRINON, Paris, Pharmacist of the first class, Laureate of the Hospitals of Paris. Samples may be obtained by application to

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DRAGEES OF COD LIVER EXTRACT.

Careful experiments have established the fact that the **EXTRACT OF COD LIVERS** contains very valuable properties, which render it superior to the ordinary cod liver oil. It is composed principally of *Gaduine*, large proportions of *Iodides*, *Chlorides*, *Bromides*, *Phosphoric Acid*, *Lime*, *Soda* and *Ammonia*, and especially *Propylamin*, all of which enter, but in very small proportions, into cod liver oil.

These dragees of pure cod liver extract take the place of cod liver oil, and have been used with eminent success by medical celebrities of Europe in cases of *Scrofula*, *Rheumatic Affections*, *Rachitism*, *Phthisis*, and in all cases where a propylamic medication is indicated.

MEYNET'S DRAGEES are sold in bottles containing 100 dragees. Dose, 2 to 6 a day. Each dragee is *equivalent to two* tablespoonfuls of cod liver oil.

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The numerous experiments made by the most distinguished practitioners of our days in France and America have demonstrated that Dr. Rabuteau's preparations of Iron are superior to all other chalybeates in the treatment of *Chlorosis, Anæmia, Debility, Exhaustion, Convalescence, Weakness of Children*, and all diseases caused by a deterioration of the blood.

Dr. Rabuteau's Dragees (sugar coated pills) do not blacken the teeth, and are assimilated by the most delicate stomachs without causing constipation. Dose, 2 morning and evening, at meal time.

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This is the only complete, reliable and effective inhaler in use, arranged for the direct application of Muriate of Ammonia and other remedial agents in the state of vapor to the diseased parts of the air passages in the treatment of catarrh and diseases of the throat and lungs. No heat or warm liquids required in its use.

It is entirely different from the various frail, cheap instruments that have been introduced.

KIRKWOOD'S INHALER is accompanied by testimonials of the highest professional character, together with carefully prepared formulas for use.

Retail Price, complete, $5.00; Small size, $2.50. A liberal discount allowed to the trade and profession.

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Blancard's Pills of Iodide of Iron are so scrupulously prepared, and so well made, that none other have acquired a so well deserved favor among physicians and pharmaceutists. Each pill, containing one grain of proto-iodide of iron, is covered with a finely pulverized iron, and covered with balsam of tolu. They are sold in bottles containing 50 and 100 pills. Dose, two to six pills a day. The genuine have a *reactive silver seal* attached to the lower part of the cork, and a green label on the wrapper, bearing the fac-simile of the signature of Blancard *Pharmacien, No. 40 Rue Bonaparte, Paris,* without which none are genuine.

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The form of Globules is by far the most convenient as well as the most elegant form for administering liquid preparations or powders of unpleasant taste or odor. The following varieties are now offered :

Globules of **Ether ; Chloroform ; Oil of Turpentine ; Apiol ;**
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Tar ; Venice Turpentine ; Copaiba ; Copaiba & Tar ;
Oleo-Resin of Cubebs ; Balsam of Peru ;
Oil of Eucalyptus ; Cod Liver Oil ; Rhubarb ;
Bi-carb. of Soda, Sulph. Quinia, &c.

The superiority of these Globules over other forms consists in the ease with which they are taken, and in their ready solubility and hence promptness of action.

They are put up in bottles of 100 each.

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VIENNA, 1873. PHILA. 1876.

It is sold in 1 oz., 8 oz., and 16 oz., bottles. Beware of so-called French Pepsines bearing fictitious names. Ask for and take only **Boudault's.**

MEDAL OF MERIT. MEDAL OF MERIT.

E. FOUGERA & CO., Agents, New York.

TO THE MEDICAL PROFESSION.

MALTINE.

(EXTRACT OF MALTED BARLEY, WHEAT AND OATS.)

THIS PREPARATION
contains from Three to Five times the Medicinal and Nutritive Elements found in Extract of Malt.

MALTINE is a highly concentrated extract of malted *Barley*, *Wheat* and *Oats*, containing, undiminished and unimpaired, all the medicinal and nutritious principles found in these cereals. By the most carefully conducted scientific process we are enabled to offer to the medical profession a perfect article, possessing from *three* to *fivetimes* the therapeutic and nutritive merit of any foreign or domestic Extract of Malt.

In support of claims we invite the attention of the profession to the following points, viz.:

FIRST: In the manufacture of **MALTINE** the evaporation necessary to reduce it to its great density is conducted in vacuo, at a temperature ranging from 100° to 120° Fahr.; while most manufacturers of Extract of Malt resort to "open pan" or low pressure steam boiling, by neither of which processes can the extract be so produced as to preserve the Diastase, Phosphates and Albuminoids on which its remedial value so greatly depends, and the product is either of a dark color or of a low specific gravity, possessing little virtue aside from the saccharine matter which it contains.*

SECOND: *Carbon*, *Hydrogen*, *Nitrogen*, *Phosphorus*, *Sulphur*, *Iron*, *Magnesium* and *Potassium*, are essential elements in the food of man, and it is only in **MALTINE**, containing the combined properties of Malted *Barley*, *Wheat* and *Oats* that all these principles can be found in the proper proportions; Extract of Malt made from *Barley alone* is wanting in some of the most important of these elements.

THIRD: *Gluten* is the most nutritious principle found in the cereals, and is the only vegetable substance which will, alone, support life for any great length of time. It is composed of three distinct nitrogenous principles, together with fatty and inorganic matters, and is analogous to animal fibrine. **MALTINE** contains twenty times the quantity of *Gluten* found in any Extract of Malt.

FOURTH: LIEBIG says "Wheat and Oats stand first among our list of cereals in combining all the elements in proportions necessary to support animal life. They are especially rich in muscular and fat producing elements." The only reason we use Malted Barley in the manufacture of **MALTINE** is that it contains larger proportions of mineral matters (bone producers), and Diastase. It is deficient in all other essential elements.

We believe that any practitioner will readily recognize the superiority of **MALTINE,** and would request a trial and comparison of merits with any article offered for similar uses.

---

*As a sure test for Diastase and the Albuminoids, a small quantity should be put in a test tube or small vial, largely diluted with water, and heated to the boiling point, when the Albumen, if present, will coagulate, and appear in little flocculent particles throughout the liquid. If the extract remains clear, it is proof that it has already been coagulated by excessive heat, and removed by filtration during the process of manufacturing. Any heat which will coagulate Albumen will inevitably destroy the digestive power of Diastase.

(OVER.)

The Nitrogenous constituents of MALTINE have a composition identical with that of the chief constituents of the Blood, and therefore contain nearly every element requisite for the reproduction of the human body.

MALTINE AND ITS COMPOUNDS

Can undoubtedly be used with greater success than any other remedy now known, in cases of general and nervous Debility, Indigestion, imperfect Nutrition and deficient Lactation; Pulmonary affections, such as Phthisis, Coughs, Colds, Hoarseness, Irritation of the Mucous Membranes and difficult expectoration; Cholera Infantum and wasting diseases of children and adults; Convalescence from Fevers, and whenever it is necessary to increase the vital forces and build up the system.

WE MANUFACTURE THE FOLLOWING PREPARATIONS, THE FORMULAS AND DOSES OF WHICH ARE GIVEN IN OUR DOSE BOOKS AND ON THE LABEL ATTACHED TO EACH BOTTLE:

MALTINE with Hops.

MALTINE, Ferrated:

This combination is specially indicated in Anæmia and Chlorosis, and in all cases of defective nutrition where Iron is deficient in the system.

MALTINE with Phosphates Iron and Quinia:

A powerful general and nutritive tonic.

MALTINE with Phos. Iron, Quinia and Strychnia:

A powerful nutritive, general and nervous tonic.

MALTINE with Hypophosphites:

This preparation is specially indicated in Phthisis, Rickets and deficient ossification.

MALTINE with Pepsin and Pancreatine:

One of the most effective combinations in Dyspepsia, Cholera Infantum and all diseases resulting from imperfect nutrition. It contains three of the all-important digestive agents, Diastase being one of the constituents of the **MALTINE**. We believe there are few cases of Dyspepsia which will not readily yield to the medicinal properties of the above combination, while the system is invigorated by its nutritive qualities.

MALTINE with Beef and Iron:

One of the most valuable combinations in cases of general Debility, when there is deficient nutrition and a deficiency of Iron in the system.

MALTINE with Cod Liver Oil:

The most perfect emulsion, and most agreeable and effective mode of administering this nauseous but valuable Oil yet discovered.

MALTINE with Cod Liver Oil and Phosphorus:

In this combination the Phosphorus has no irritant effect upon the stomach.

MALTINE with Cod Liver Oil and Iodide of Iron:

This is prepared with the tasteless Iodide of Iron, which undergoes no chemical change from contact with the Oil, and does not blacken the teeth.

MALTINE with Alteratives:

In this preparation **MALTINE** is combined with the most valuable alteratives known, such as Iodides, Bromides and Chlorides, and will fully meet the requirements of the practitioners in Syphilis, Scrofula and all depraved conditions of the blood. Each fluid ounce contains: *Chloride Calcium*, 10 grains; *Chloride Magnesium*, 10 grains; *Bromide Sodium*, 5 grains; *Iodide Potassium*, 1 grain; *Iodide Iron*, ¼ grain. Dose, one teaspoonful to one tablespoonful.

We also manufacture a perfectly prepared **Exract of Malt** from *Barley only*.

MALTINE preparations are sold at the same prices as **Extract of Malt** and its combinations, and are put up in amber bottles holding sixteen fluid ounces; each bottle inclosed in a folding paper box.

REED & CARNRICK,

Manufacturing Pharmacists,

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FOOD FOR

Brain, Nerve, Bone and Muscle.

SAYRE'S WINE of the HYPOPHOSPHITES AND BEEF.

A most perfect medicine, containing *every ingredient necessary for supplying the waste of, and sustaining the human body.* Very palatable, easily digested, and eminently suited for persons with weak digestion, for debilitated children, delicate invalids, and consumptive patients. It supplies to the blood all that is necessary to impart *tone* to the *nerves,* and *food* for *brain, bone* and *muscle.* Each pint contains the concentrated juice of two pounds of best beef, **180 grains hypophosphite of lime, 60 grains hypophosphite of soda, 60 grains of hypophosphite of potash,** combined with the purest sherry wine and tonics. Dose: Dessert or tablespoonful before each meal.

WINE OF THE HYPOPHOSPHITES,

(SAYRE'S).

Each tablespoonful contains ten grains Hypophosphite Lime and five grains each of Soda and Potash. It is pleasant of taste, gently stimulating in effect, aids digestion, increases the appetite, and is retained by the most delicate stomach. Dose: Teaspoonful to dessertspoonful.

These Preparations are put up in pint and five-pint bottles for the trade. Prepared only by

T. H. SAYRE,

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NORWEGIAN
COD LIVER OIL

Is made with scientific care, at a low temperature, in order to insure its PALENESS, SWEETNESS, and FREEDOM from UNPLEASANT FLAVOR. It contains less fats or stearine, and is therefore digested by delicate stomachs, which cannot tolerate the coarser oils which are put on the market. Each bottle contains a full pint. None genuine without our firm name blown in the bottle.

WE ALSO MAKE

Emulsion of NORWEGIAN Cod Liver Oil,
With Phosphate of Lime.
Emulsion of NORWEGIAN Cod Liver Oil,
With Lacto-Phosphate of Lime.
Emulsion of NORWEGIAN Cod Liver Oil,
With Hypophosphites of Lime and Soda.
Ferrated NORWEGIAN Cod Liver Oil.

In each of these preparations we hope to fill a desideratum long felt by the professional public Often the mineral foods are as essential in the building up of scrofulous or strumous constitutions as the Cod Liver Oil itself, and in these preparations you have the Mineral foods pleasantly emulsified with the Oil, thus rendering the whole palatable, as well as nutritious and curative. The Iodine and the other curative properties inherent in the free Oil are in no wise impaired by this process; and the Oil itself is rendered more digestible from its combination with LACTIC ACID (one of the important ingredients of the digestive fluids of the stomach), in the case of the LACTO-PHOSPHATE combination. Of the beneficial effects of PHOSPHORUS in the strumous cases, where Cod Liver Oil is indicated, it is unnecessary to speak.

FARRAND, WILLIAMS & CO.'S
ELIXIR OF PHOSPHATES, COMPOUNDED WITH CALISAYA BARK.

This elegant pharmaceutical preparation is peculiarly efficacious in all NERVOUS AFFECTIONS and the PROSTRATE CONDITION of the system. It contains PHOSPHORUS for the BRAIN and NERVE, LIME to EXCITE NUTRITION, IRON to promote the formation of the red constituents of the BLOOD, and CALISAYA BARK as a TONIC, augmenting the APPETITE, insuring DIGESTION, and giving elasticity to the MUSCULAR SYSTEM.

Farrand's Essence Jamaica Ginger.

A GRATEFUL STIMULANT and TONIC. Is an excellent preparation for DYSPEPSIA, FLATULENT COLIC, and the feeble state of the alimentary canal. As a Summer Medicine in the house it has no equal.

DR. JACK'S SANTONINE LOZENGES.

A SURE REMEDY FOR WORMS IN CHILDREN. Each Lozenge contains half a grain of Santonine, the active principle of Wormseed.

☞ In addition to the above, we manufacture a full line of Medicated Elixirs, Wines and Syrups, in the manufacture of which none but the CHOICEST and PUREST materials are used.

FARRAND, WILLIAMS & CO.,
Manufacturing Chemists, Detroit.

G. A. SHELEY,
Successor to Sheley & Roberts,
MANUFACTURER OF
Sacch. and Conct. Pepsin, Pancreatine,
AND ALL KINDS OF
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Professor of Toxicology and Medical Jurisprudence.

DANIEL LEFERTÉ, M. D.,
Demonstrator of Anatomy and Lecturer on Orthopedic Surgery and Tumors.

J. G. JOHNSON, M. D.,
Lecturer on Diseases of Mind and Nervous System.

J. H. CARSTENS, M. D.,
Lecturer on Clinical Medicine.

F. A. SPALDING, M. D.,
Lecturer on Diseases of the Skin.

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Professor of Chemistry and Director of the Chen ical Laboratory.

LEARTUS CONNOR, M. D., Secretary,
Professor of Physiology and Diseases of the Ey and Ear.

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Lecturer on Anatomy and Genito-Urinar Diseases.

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Lecturer on Materia Medica, Therapeutics an Clinical Laryngology.

HAL. C. WYMAN, M. D.,
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C. C. YEMANS, M. D.,
Lecturer on Chemistry.

E. A. CHAPOTON, M. D.,
Demonstrator of Practical Physiology and I structor in Anatomy and Surgery.

J. W. ROBERTSON, M. D.,
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PRELIMINARY SESSION opens Wednesday, September 3d, 1879, and closes September 30th The Clinics are held and the Lectures delivered by the Professors of the regular Faculty, and i the same order and frequency as during the Winter Term. Opportunity is given to dissect o work in the Chemical and Physiological Laboratories.

The REGULAR SESSION opens Wednesday, October 1st, 1879, and closes March 2d, 188 During this term all the branches of *General Medicine* and *Surgery*, both scientific and practical are taught with care and thoroughness. All students are daily examined on the subjects of th lectures and on their dissecting and laboratory work.

Senior students have *daily practice* in the *art of examining patients*, in forming their own diagnosis, prognosis and treatment. As this is done under the direction of the professor holding eac clinic, and in the presence of the class, it constitutes an invaluable course of training.

The RECITATION SESSION begins March 10th, 1880, and closes June 23d, 1880. Daily during this term will be held recitations for both Seniors and Juniors, and one or two clinic and a lecture.

The recitations will embrace a thorough drill upon the general subjects of the Regular Session viz: Anatomy, Chemistry, Physiology, Practice of Medicine, Materia Medica and Therapeutics Surgery, Obstetrics, Diseases of Women and Children.

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For the Recitation Term the Lecture Fees are $10, to those who attend the other courses. Al others are required to matriculate and take out the Hospital tickets.

All fees payable in advance to the *Secretary*.

Announcement and Catalogue, or any further information which may be desired, can b promptly obtained by addressing

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